

IPAC22

IPAC'22

13th INTERNATIONAL PARTICLE ACCELERATOR CONFERENCE

June 12-17, 2022

IMPACT FORUM
Muangthong Thani
Bangkok, Thailand

CONFERENCE GUIDE BOOK

Siam Photon

THAI SYNCHROTRON NATIONAL LAB

ScandiNova

TCEB
THAILAND CONVENTION & EXHIBITION BUREAU

IPAC22

13th International Particle Accelerator Conference

June 12-17, 2022

Hosted by SLRI at IMPACT FORUM Muangthong Thani
Bangkok, Thailand

Siam Photon

THAI SYNCHROTRON NATIONAL LAB

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20 years



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Greetings

Welcome from the OC Chair



Prapong Klysubun

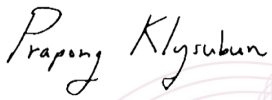
IPAC'22 Organizing Committee Chair

Dear Colleagues,

Greetings and welcome to Bangkok and the 13th International Particle Accelerator Conference. I am very proud that Thailand has the opportunity to be the host of the first IPAC that makes a return to a physical meeting after the Covid-19 pandemic. In this conference, you will find a collection of excellent invited and contributed talks, as well as outstanding posters, highlighting scientific achievements from all over the world. The Scientific Program Committee, which comprises of leading physicists worldwide, has been working very hard to ensure that the quality of the IPAC '22 scientific program is second to none.

This edition of IPAC is certainly ranked among the most difficult IPACs to organize. The world has just recovered from the most prevalent health-related crisis it has seen in a century. At this time, the Covid-19 situation is substantially improved from the previous two vvtors. Molecular structure of the virus, an essential information for subsequent rational drug design, was solved at synchrotron light sources. Still, at present, the Covid-19 pandemic either prohibit or impede participation from several regions. Hopefully, this situation will soon be overcome with our resilience.

I would like to express my gratitude to the Local Organizing Committee team members who have been working tirelessly days and nights, preparing all the facets of this conference. Moreover, I wish to thank all the delegates, as well as the industrial exhibitors, for joining us and making this IPAC a successful conference where knowledge and ideas are exchanged, and new collaborations are made. I also wish all the participants a pleasant stay in the beautiful city of Bangkok.



Prapong Klysubun

IPAC'22 Organizing Committee Chair

Greetings

Welcome from the SPC Chair



Hitoshi Tanaka

IPAC'22 Scientific Program Committee Chair

Dear Colleagues,

The field of accelerator science and technology encompasses a broad scope of areas from fundamental beam physics to specialized technologies. Research results have contributed to improving and accelerating social development, including exciting new developments in green innovation. The International Particle Accelerator Conference (IPAC), which is the largest conference addressing the full range of this versatile field, provides a great opportunity to discuss various issues, to exchange new ideas, and to share valuable experience with international participants with diverse backgrounds and expertise.

The Scientific Program Committee (SPC) with support from the Science Advisory Board (SAB) developed the oral program to make this year's conference especially interesting. It will address many relevant and important topics, while providing balance among the eight Main Categories (MCs), technologies, components, regions, genders, etc.

The oral program will include two parallel sessions featuring about eighty oral presentations throughout the week as well as plenary sessions at the opening, closing, and special ceremony of the conference. Four poster sessions, also important aspects of the conference, will be held on Monday from 14:00 to 16:00, on Tuesday and Thursday from 16:00 to 18:00, and on Wednesday from 16:20 to 18:20. Industry and award sessions will take place in the afternoon on Wednesday and Thursday, respectively. As usual, there will be a student poster session on the Sunday afternoon before the main conference program begins.

Finally, this excellent scientific program, established through the collaborative work of SPC, SAB, the Local Organizing Committee (LOC), the Organizing Committee (OC), and all the participants by overcoming difficulty caused by the COVID-19 pandemic, is now ready and waiting for your arrival.

I wish you an exciting and productive IPAC'22 in Bangkok!



Hitoshi Tanaka

IPAC'22 Scientific Program Committee Chair

Greetings

Welcome from the LOC Chair



Porntip Sudmuang

IPAC'22 Local Organizing Committee Chair

Dear Colleagues,

On behalf of IPAC'22 Local Organizing Committee, it is my great pleasure to welcome you to Bangkok, Thailand for the 13th International Particle Accelerator Conference (IPAC'22). The IPAC'22 is hosted by Synchrotron Light Research Institute (SLRI). It is the first IPAC conference held in Bangkok, the capital and most populous city of Thailand. Participants will experience traditional Thai culture, gleaming temples, and authentic Thai cuisine.

Over the past 12 years, IPAC has become the preeminent international annual event for the worldwide accelerator community and industry. For nearly three years, with the COVID-19 pandemic, we have already missed some opportunities to meet, share, and learn in person with accelerator scientists, engineers, students, and vendors from different countries. IPAC'22 is decided to be mindfully returned to an in-person conferences to provide participants with chances to share experience and knowledge through face-to-face interactions.

Due to the current travel restriction put in place in many countries, making decision to participate in the IPAC'22 may be a difficult situation for many participants. However, we finally have a satisfying number of participants comparing the targeted one. I do appreciate all participants' support to the conference.

As the Chair of Local Organizing Committee of IPAC'22, I do realize that the success of the conference, especially in the current travel restriction, comes from the great efforts and devotions of many committees working with us in planning stages, creating and finalizing the conference program, and supporting other arrangements.

I would like to express my sincerest thanks to all members of Scientific Program Committee, Local Organizing Committee, invited speakers, industrial exhibitor, and presenters for their contributions as well as to all participants for making the conference possible.

I do hope you fully enjoy your stay and have a great time with us in Bangkok during the conference period.

Porntip Sudmuang

Porntip Sudmuang

IPAC'22 Local Organizing Committee Chair

Welcome From IMPACT Exhibition and Convention Centre



Loy Joon How

IMPACT Exhibition
and Convention Centre

Sawadee krub!

On behalf of Thailand and our IMPACT Exhibition and Convention Centre, it is my pleasure to welcome delegates of the 13th International Particle Accelerator Conference (IPAC' 22) to Thailand.

Bangkok, the capital city of Thailand and the most preferred MICE destination is all set to offer you our renowned hospitality, food, historical and cultural attractions, and not forgetting the shopping!

As the biggest and most modern exhibition and convention venue in Thailand, IMPACT is pleased to do our part in facilitating useful exchanges amongst accelerator scientists, engineers, students and industrial vendors during IPAC'22 and at the same time, helps to deliver a memorable experience for all attendees to meet, interact and network over the next few days.

I wish everyone a successful and enjoyable event with plenty of exchanges ahead!

Kop Kun Krub!

Your sincerely

Loy Joan How

General Manager

IMPACT Exhibition and Convention Centre

Policies

The host organization of IPAC'22, the Synchrotron Light Research Institute (Public Organization) – SLRI, is committed to removing barriers which may prevent certain groups in the community from attending or participating in the conference to ensure attendance at conferences represents a cross section of the community.

As such, SLRI has adopted a Gold Standard for conferences which contains a number of policies for ensuring the conference environment allows full inclusion of people regardless of their race, ethnicity, gender, sexual orientation, age, physical abilities or religious beliefs.

• Diversity and Representation Policy

The organizer of IPAC'22 aims to achieve a high level of diversity in speakers to reflect the diverse accelerator community. This is achieved by consideration of regional, gender and career level during development of the scientific program. Statistics on the achieved speaker diversity will be made available on the conference website.

• Accessibility

The venue is fully accessible for those with disabilities. Additional assistance for accessibility needs can be arranged via contact with the conference organizing team.

There will be parent rooms available with video feeds of the current talks for delegates with small children. Support for researchers with carer responsibilities to travel to and attend the conference will be available on request.

For all enquiries regarding accessibility and support, please contact: ipac22info@slri.or.th

• Data Collection and Reporting

In order to track and understand the diversity of our community and to see if we are meeting our diversity goals we will be collecting some diversity data through our conference registration. This data will only be used for generating conference statistics and will be optional to provide. We aim to make these statistics publically available on our website after the conference.

• Non-Discrimination and Anti-Harassment Policy

IPAC'22 is committed to providing a conference experience where everyone is treated with respect, free from discrimination or harassment or bullying for any reason; for example, because of race, color, gender, ethnicity, ancestry, national or cultural origin, religion, creed, sexual or affectional orientation, gender identity and expression, pregnancy, age, disability or handicap, physical appearance, body size, genetic information, political affiliation, matriculation, veteran or military status, marital status, citizenship status or socio-economic status, or on any other legally prohibited basis.

Discrimination or harassment or bullying of conference participants will not be tolerated in any form. Conference participants violating this rule may be sanctioned or expelled from the conference without a refund at the discretion of the conference organizers.

Harassment includes: offensive verbal comments, sexual images visible in public spaces, deliberate intimidation, stalking, following, harassing photography or recording; sustained disruption of talks or other events; inappropriate physical contact, and unwelcome sexual attention.

Exhibitors in the Industrial Exhibition are also subject to the anti-harassment policy. In particular, exhibitors should not use sexual images, activities, or other material in their displays. Booth staff (including volunteers) should not use sexual clothing, uniforms, costumes, or otherwise create a sexualized environment.

If a participant engages in discriminatory, harassing or bullying behavior, the conference organizer may take any action they deem appropriate, including warning the offender or expulsion from the conference with no refund. If you are being harassed, notice that someone else is being harassed, or have any other concerns, please contact a member of conference staff immediately.

Conference staff will be happy to help participants contact hotel/venue security or local law enforcement, provide security escorts, or otherwise assist those experiencing harassment to feel safe for the duration of the conference. We value your attendance.

Participants are expected to follow these rules at all conference venues and conference-related social events.

• Disclaimer

The organizer is not liable for damages and/or losses of any kind which may be incurred by the conference delegates or by any other individuals accompanying them, both during the official activities as well as going to/from the conference. Delegates are responsible for their own travel and belongings.

About SLRI

The Synchrotron Light Research Institute (SLRI) is a Public Organization under the supervision of the Ministry of Higher Education, Science, Research and Innovation of the Royal Thai Government. The institute operates the Siam Photon Laboratory (SPL) which is the first synchrotron facility of Thailand. The SPL services synchrotron light from the Siam Photon Source (SPS), a 1.2 GeV synchrotron light source. Many experimental techniques are available at the SPL for Thai and international users.

The Siam Photon Project was approved by the government of Thailand in 1996 to develop the Siam Photon Source (SPS), the first synchrotron light source in Thailand. Major parts of the source were transferred from the shut down SORTEC laboratory, Japan. The storage ring was redesigned for 1.2 GeV operation. The Siam Photon Project was managed by then the National Synchrotron Research Center (NSRC) which was established under the resolution of the Cabinet of the Thai Government met on 5 March 1996. At that time, the Cabinet agreed on the establishment of the NSRC Project under supervision of the Ministry of Science, Technology and Environment. The project aimed at promoting basic and applied scientific research in Thailand. The NSRC was located at the Technopolis of Suranaree University of Technology in Nakhon-Ratchasima. Later, the Synchrotron Light Research Institute (SLRI) was established to replace the NSRC.



General and Local Information

• Venue and Location

IPAC'22 will be held at IMPACT EXHIBITION AND CONVENTION CENTER. Established in 1999, the IMPACT Arena and the IMPACT Exhibition and Convention Center are one of the Asia's largest and the most modern exhibition and convention centers with usable indoor space over 140,000 square meters comprising a variety of venue sizes to meet all kinds of events requirement.



- **Conference Area**

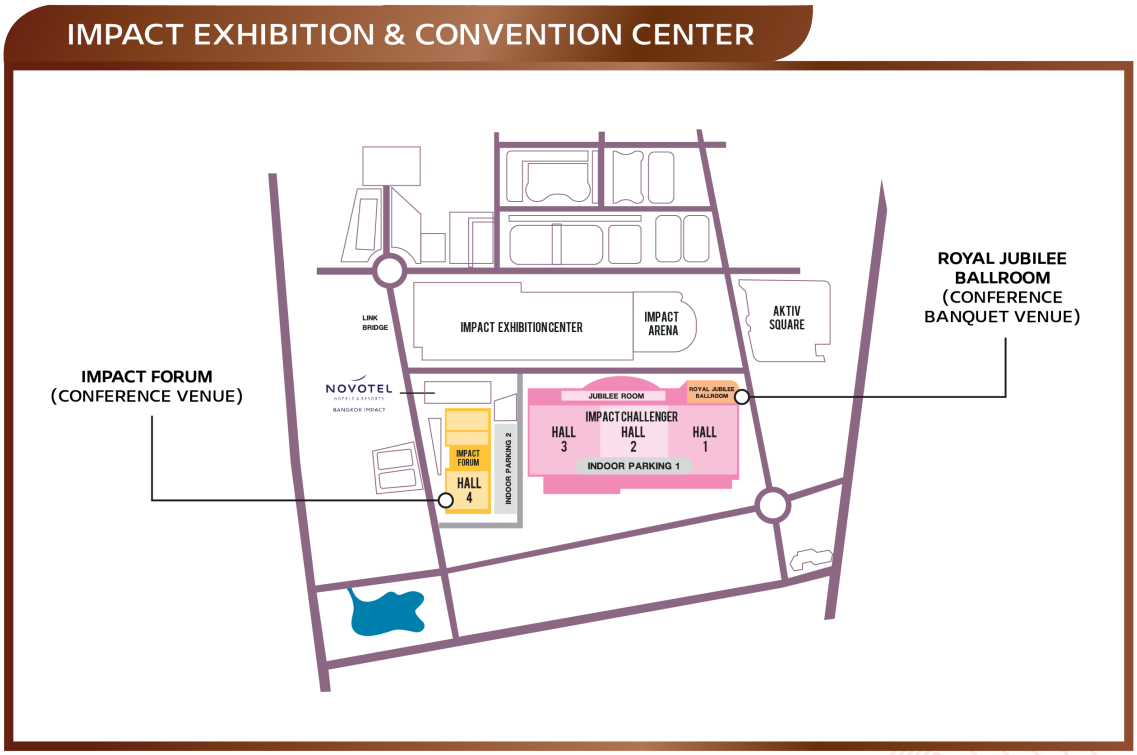
The IMPACT Forum is a stand-alone all-purpose convention center with a large reception area, wellness center, business center, and media center, houses an 11,165-square-meter event space and the 2,000-square-meter Grand Diamond ballroom with a seating capacity of 2,000 people as well as 26 "Sapphire" function rooms.



Punctuated with Thai contemporary style and modern style function area with high-technology fittings to serve multi-purpose events for organizers and attendees, the IMPACT Forum Hall 4 (IPAC 2022 venue) is ideally suited for trade shows, concerts, seminars, multi-day conferences, and any MICE events.

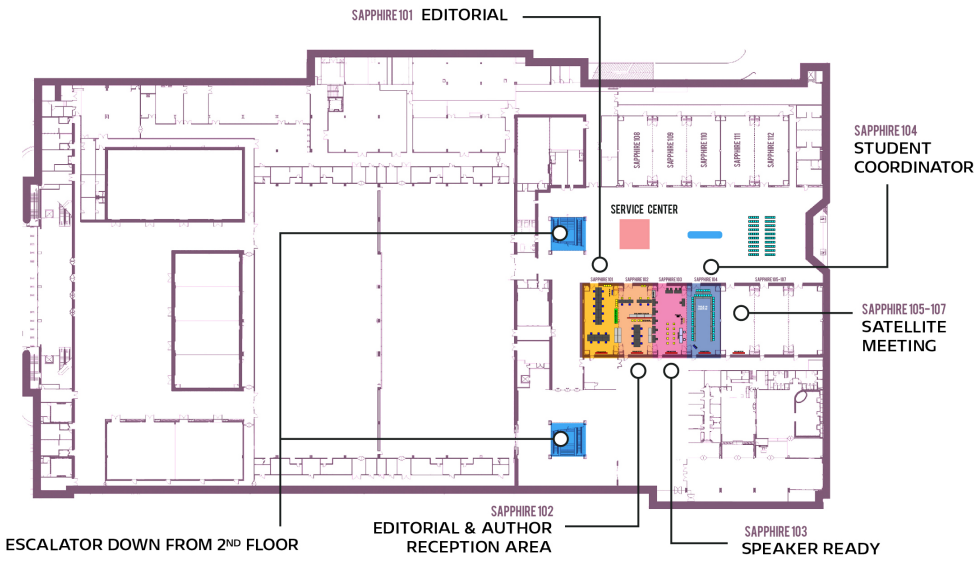


- **Venue Floor Plans**

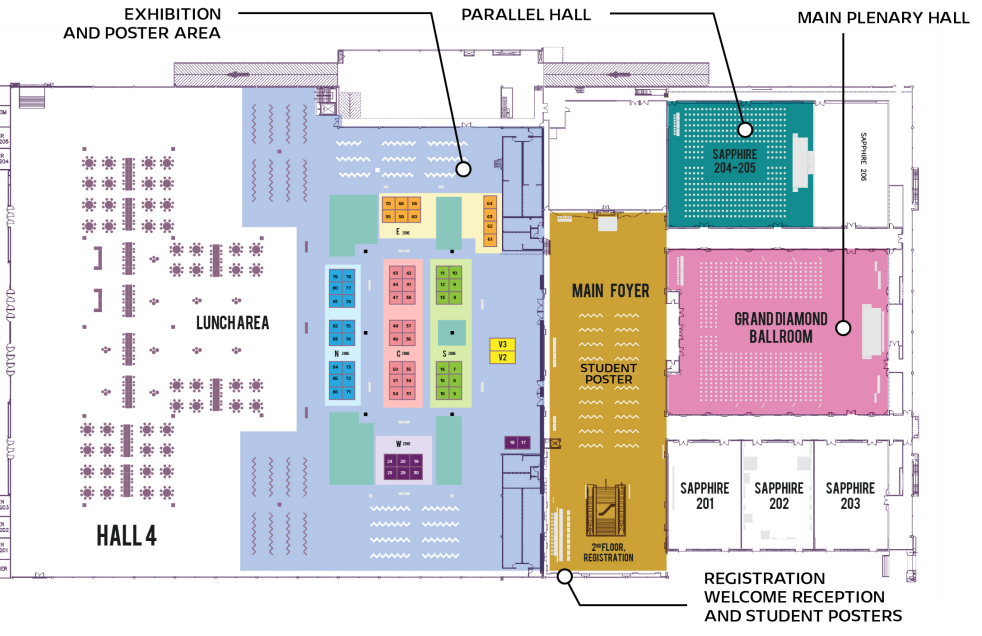


- **Venue Floor Plans**

IMPACT FORUM, 1ST FLOOR



IMPACT FORUM, 2ND FLOOR





- **Array of Transportation Services**

There are several ways to get to the IMPACT Muang Thong Thani. Using public transport is recommended. Getting to the event center by on-call taxi, minibus, or public bus is easy. Here are some tips:

Van : There are public transportation services nearby the IMPACT e.g. van, bus, train and taxi. There are van stations in the IMPACT Area. Visitors can find them in front of the IMPACT Forum and on the 2nd floor of the Cosmo Bazaar. They provide services to many routes throughout Bangkok. Service charges are affordable. Some routes link to train transportation services. Visitors can take vans for just less than an hour for change to sky trains and underground trains at Chatuchak station.

Public Bus : Take a bus No.166 running between the Victory Monument and Muang Thong Thani. The bus runs every half an hour and stops at IMPACT bus stops.

Taxi : Taxi is one of the best alternatives to get to the IMPACT. This convention centre is also highly accessible for delegates travelling to Bangkok by air. The Don Muang International Airport is just 25 minutes from the convention centre by a taxi with a service charge of about THB 150. A metered taxi with a sign "TAXI-METER" is recommended.

Car : If driving a car to the IMPACT is your alternative, tollways are also in the area. The IMPACT is close to Vibhavadi road and Cheangwattana road. You can drive via Srirat urban network expressway or Don Muang tollway. There are many car parks around the area and some of those are free of charge.

- **Transportation**

Recommened option :



Taxi

Taxi is one of the best alternatives to get to the IMPACT. This convention center is also highly accessible for delegates. Suvarnabhumi International Airport is approximately 45 minutes to IMPACT Muang Thong Thani by a taxi with a service charge about 600 – 700 Baht Public taxi stand is located on Level 1 (Ground Level) near entrances 3, 4, 7 and 8.

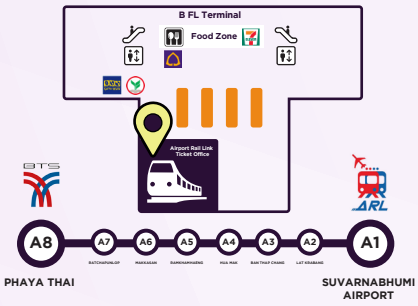
Taxi fare : metered taxi fare plus 50 Baht airport surcharge, and expressway fees.

Other option :

STEP 1

Take Airport link city line from Suvarnabhumi station (B floor terminal) to Phaya Thai station

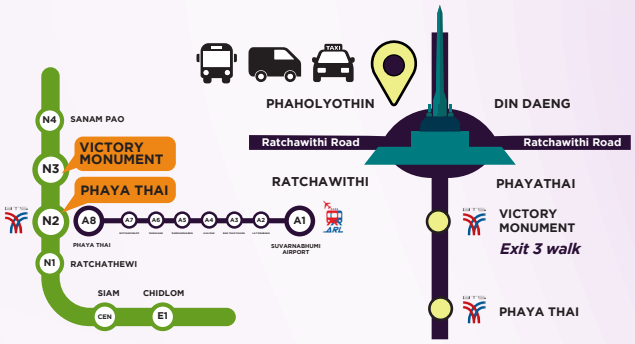
Operator details
- Airport link comes every 15 minutes
- Price is 45 Baht.
- 26 minutes to Phaya Thai station



STEP 2

Take BTS Sky Train Sukhumvit Line (Light Green Line) from Phaya Thai station to Victory Monument station and take Exit 3 walk to Phaholyothin Island

Operator details
- BTS comes every 5-6 minutes



STEP 3

Take a bus or a van to IMPACT Muang Thong Thani

Option 1 : Take a van to IMPACT Muang Thong Thani parking on the Phahon Yothin side, behind Dunkin Donuts, near the Government Savings Bank.
- Price is about 35 Baht.
- 30 - 45 minutes to Impact Muang Thong Thani



Option 2 : Take a bus number 166 to the bus stop in front of IMPACT Muang Thong Thani. The bus parks at the Phahon Yothin bus station.
- Price is about 24 Baht.
- 30 - 45 minutes to IMPACT Muang Thong Thani



STEP 4

Bus and van stop at IMPACT Muang Thong Thani

(Aktiv Square, the parking lot in front of Grandma's Shrine)
Then, walk about 750 m. from the Aktiv Square to IMPACT Forum



- Conference Transportation Service

IPAC'2022 Shuttle Bus

IPAC'22 shuttle bus is provided free of charged for all delegates on 12th June 2022.
The shuttle bus departs from Suvarnabhumi Airport on the 2nd floor (arrivals) outside Door 10.
Delegates are able to use the shuttle bus service details are as below.

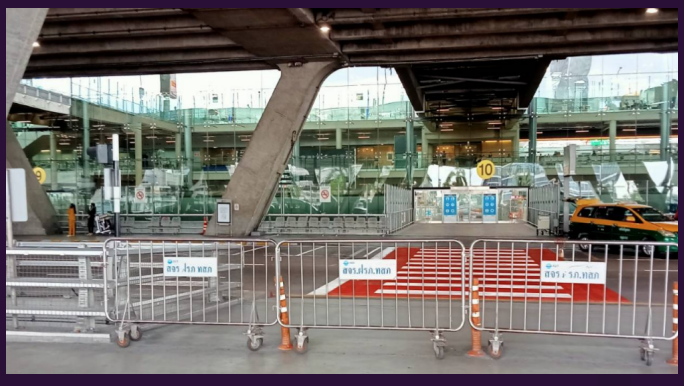
Sunday 12th June 2022

1st round : 11.00 : Pick- up at Suvarnabhumi Airport
Drop at Impact Arena Muang Thong Thani, Novotel Hotel, and Ibis Hotel

2nd round : 16.00 : Pick- up at Suvarnabhumi Airport
Drop at Impact Arena Muang Thong Thani, Novotel Hotel, and Ibis Hotel

The service is on the first come, first served basis.





Suvarnabhumi Airport on the 2nd floor (arrivals outside Door 10)

- ## Cautionary Measures Related to COVID-19

Please be noted that masks are still required in most places, especially indoor and in public transports. In the case that you are tested positive for Covid-19, for safety of other participants,we ask you to refrain from attending the remaining days of the conference and will provide a Zoom link for you to access the conference program remotely.



- **General Information**

Time Zones

Thailand has only one time zone. Thailand follows UTC+07:00, which is 7 hours ahead of UTC.

Electrical Plugs

You may need an adapter in order to plug your appliances into the power sockets. In Thailand, there are three associated plug types, types A, B and C. Plug type A is the plug which has two flat parallel pins, plug type B has two flat parallel pins and a grounding pin and plug type C has two round pins. Thailand operates on a 220V supply voltage and 50Hz.

Sending Mail

Post offices are usually open 8.30am-4pm, Monday to Friday. The closest post office around the conference venue is "Impact Arena Post Office". The bus no. 166 AC will travel pass Impact Arena Post Office.

Currency

Thailand's national currency is Thai Baht (THB), which comes in denominations of 20THB, 50THB, 100THB, 500THB and 1,000THB notes. Coins come in 1THB, 2THB, 5THB and 10THB coins, respectively.

Credit cards such as American Express, MasterCard, Visa, UnionPay and JCB are accepted in Thailand. VISA or MasterCard can be used everywhere credit cards are accepted. A good tip is to carry multiple credit cards and some cash. Merchants may impose credit card surcharges in some places.

Traveller's cheques are not widely accepted in Thailand. You are not recommended to carry travel cheques to Thailand.

Thailand has a Goods and Services Tax (GST) of 7 per cent. You may be able to claim a refund for the GST paid on goods at the Tax Refund Scheme at the Suvarnabhumi Airport or Don Mueang International Airport before departing Thailand. Tourist Refund Scheme facilities are located in the departure are of international terminals.

Weather

The average high-temperature, in June, in Bangkok, Thailand, is around 34.4°C (93.9°F), while the average low-temperature is 26.3°C (79.3°F). In May, the average heat index (a.k.a. 'feels like', 'apparent temperature'), that combines both air temperature and relative humidity, is evaluated at 50.9°C (123.6°F).

Tipping

Tipping is NOT customary in Thailand, there is absolutely NO mandatory requirement to tip anyone, but small gratuities for great service are very much appreciated. However, some hotels, restaurants and cafes will add a 10 percent surcharge to prices.

International Dialing Codes

The international dialing code for Thailand is 66. Each region also has an area code, please ask at the hotel lobby or find more information via **https://www.rebtel.com/en/international-calling-guide/phone-codes/thailand/**.

Further useful Hotline in Thailand is listed here:

- To call an emergency or accident number in Thailand is 1669.
- To call a Police is 191.
- To call a Fire is 119.

Left – Hand Traffic

In Thailand, cars, bikes and other vehicles travel on the left-hand side of the road of a bi-directional traffic. Pedestrians also walk on the left-hand side of a path or a corridor in general. Look to your RIGHT first then left to check incoming traffic when crossing a street or road. Same rules apply when you are making turns when driving.



First Aid at Venue

In case of medical assistant is required, please notify event security immediately or first aid provider at first aid room located at entrance 3 in IMPACT Forum building. You can also call 1669 in case of emergency, which provide medical assistant from outside within the venue area.

Hospital

- **Mongkutwattana Hospital**

  34, 40 Thanon Chaeng Watthana, Thung Song Hong, Lak Si, Bangkok 10210

  Phone: 02-5745000

  Open: 24 hours

  Website: https://www.mongkutwattana.co.th

- **World Medical Hospital**

  Chaeng Wattana-Parkkred 19 Alley, Tambon Pak Kret, Pak Kret District, Nonthaburi 11120

  Phone: 02-8369999

  Open: 24 hours

  Website: https://www.theworldmedicalcenter.com

Walk-in-Clinics

- **Mitrmitree Clinic**

  47/291 Moo. 3 Kaitak Building, Level 1, Popular 3 Road, Baanmai, Nonthaburi, Thailand 11120

  Phone: 02-010 8251

  Open: 8.00 – 18.00 hrs.

  Website: http://www.mithmitreeclinic.com/

- **Muangthong Thani Clinic**

  58/107 Moo 1, 58 Chaengwatthana Road, Khlong Kluea, Pak Kret, Nonthaburi 11120

  Phone: 02-9817828

  Mon – Fri: 9.00 – 12.00 hrs./17.00 – 20.00 hrs.

  Saturday: 9.00 – 20.00 hrs.

Pharmacies

- **Baanya Muangthong**

  50/1211 unit A110 Bond Street, Bangpood, Pakkred, Nonthaburi, Thailand 11120

  Phone: 095 850 7788

  Open: 10.00 – 21.30 hour

- **Muangthong Drug House**

  55/606 Sukothai Avenue 99, Bond Street, Bangpood, Pakkred, Nonthaburi, Thailand 11120

  Phone: 02 043 2003 Open: 8.00 – 20.00 hour

Internet

1. Wire Internet (RJ45) with bandwidth 200/200MB are available:-

- In the room Sapphire 101
- Front of room Sapphire 101-102
- Front of room Sapphire 104,204,206
- Front of room Grand Diamond Ballroom
- In Hall 4
- Front of Hall 4
- In VIP 101-102

2. Wire Internet (RJ45) with bandwidth 100/100 MB, ZOOM Meeting service, are available at:-

- VIP101
- VIP102
- Grand Diamond Ballroom
- Sapphire 204-205
- Sapphire 103

3. WIFI with bandwidth 300/300MB are available at:-

- Sapphire 101-107
- Sapphire 204-206
- Grand Diamond Ballroom
- Hall 4
- Board room
- VIP 102-102

There are two WIFI SSIDs. One is for staff and another one is for delegate.

Security

Please wear your IPAC 2022 badge or lanyards at all times when on the conference floor IMPACT ARENA EXHIBITION & CONVENTION CENTER provide security for all functions.

Security checks may be required so please ensure you arrive in plenty of time to pass through these checks. The security and team are there for you safety. Please cooperate fully with all security and support these vital members of the team as they carry out important work to keep us all safe.

Emergency Services

In any emergency, notify your event security provider immediately or call +66 (0) 2833-5678 from mobile phone.

Security command center will contact to co-ordinate emergency service response aps required.

For non - emergency security enquiries call +66 (0) 2833-5445-7



• Registration

Exhibitor Representative Registration

Exhibitor representative registration will be available from Friday November 12, 2021. Please register from this date through the provided online registration portal.

All Registration Fees are in Thai Baht (THB).

The early–bird registration deadline is on Tuesday, April 26, 2022 (23:59 Indochina Time: UTC+7). The registration needs to be complete and all payments need to be received by the date in order that the registration will be eligible for the early–bird rate.

Registration Fee	Before April 26, 2022	From April 26, 2022
Full Registration	22,500	26,000
Day Registration	10,500	13,000
Student Full Registration	11,500	13,000
Student Day Registration	10,500	13,000
Exhibitor Representative Full Registration	22,500	26,000
Exhibitor Representative Day Registration	10,500	13,000

The following items are included in the day registration fee:

- attendance at all sessions
- conference materials
- lunches on Monday-Thursday
- coffee/tea breaks during the conference
- welcome reception on Sunday, June 12, 2022
- banquet dinner on Thursday, June 16, 2022

Accompanying Person

The following items are included in the accompanying person fee:

- welcome reception on Sunday, June 12, 2022
- banquet dinner on Thursday, June 16, 2022

Coffee breaks are not included.

Please advise the organizer if you are planning to bring children to the evening events.





Download
Conference App

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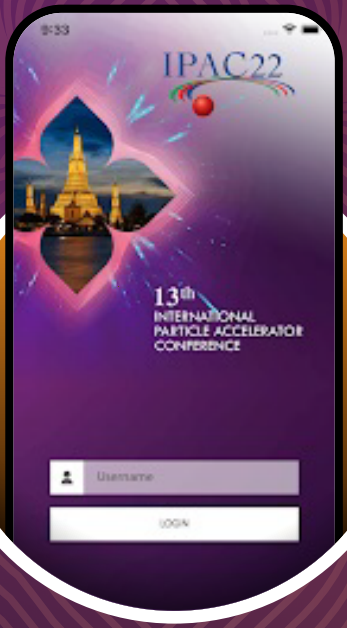
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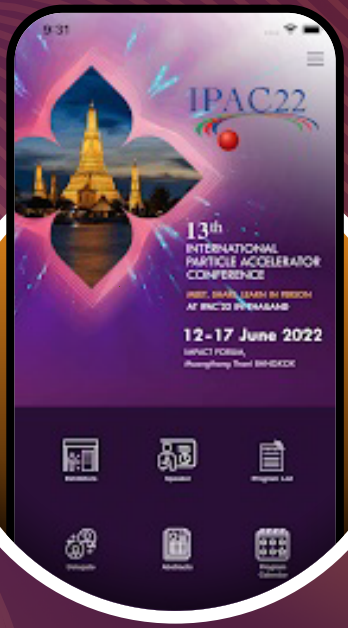
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3 ACCESS TO THE APPLICATION



Accelerator Awards

The 2022 Asian Committee for Future Accelerators (ACFA)/IPAC22 are honoured to announce the following winners have been selected:

• The Xie Jialin Prize

The Xie Jialin Prize for outstanding work in the accelerator field, with no age limit. The winner will receive a plaque, and make an oral presentation during the IPAC'22 Accelerator Prizes Special Session on Thursday, June 16, 2022.

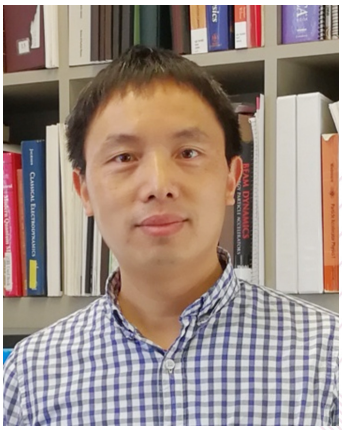


Prof. Zhentang Zhao

"For his significant contributions to the developments of the FEL theory and experiments including the first lasing of the EEHG-FEL in the world and also to the various facility constructions as the main project leader such as SSRF, SDUV-FEL and SXFEL."

• The Nishikawa Prize

The Nishikawa Tetsuji Prize for a recent, significant, original contribution to the accelerator field, with no age limit. The winner will receive a plaque, and make an oral presentation during the IPAC'22 Accelerator Prizes Special Session on Thursday, June 16, 2022.



Dr. Xiaobiao Huang

"For his contribution to the field of particle accelerators, especially in the domain of accelerator design and operation, model-independent beam dynamics analysis, beam-based optimization and control."

• The Hogil Kim Prize

The Hogil Kim Prize for a recent, significant, original contribution to the accelerator field, awarded to an individual in the early part of his or her career. The winner will receive a framed certificate and a cash prize of US $2,000, and will also make an oral presentation during the IPAC'22 Accelerator Prizes Special Session on Thursday, June 16, 2022.



Dr. Daniel Winklehner

"For his contribution to develop innovative designs of compact, high-current cyclotrons which make new opportunities for high intensity particle physics and industrial applications."

• The Mark Oliphant Prize

The Mark Oliphant Prize for a student registered for a Ph.D. or diploma in accelerator physics or engineering, or to a trainee accelerator physicist or engineer in the educational phase of his or her professional career, for the quality of work and promise for the future. Applicants will be judged on the quality of the work submitted to the conference. The winner will receive a certificate and a cash prize of US $1,000, and will have the opportunity to make a short oral presentation during the IPAC'22 Accelerator Prizes Special Session on Thursday, June 16, 2022.

Remark: Nobody was awarded the prize this year

• Prize for the Best Student Posters

Prizes for the Best Student Posters, will be awarded to 2 students whose work presented in the special student poster session is particularly meritorious. Each winner will receive a cash prize of US $500, presented during the IPAC'22 Accelerator Prizes Special Session on Thursday, June 16, 2022.

Accelerator Awards



Xie Jialin 谢家麟 (1920-2016)

- Prof. Xie Jialin (謝家麟) was born in 1920 in Harbin, China. He graduated from the Physics Department of Yenching University in 1943, and obtained a Ph.D. from Stanford University in 1951. In 1955, as chief leading scientist, with his colleagues at the University of Chicago Medical Center, he constructed the first cancer treating electron machine in the world. In 1955, he returned from the United States to China.
- After returning, he organized a group to construct the first 30-MeV Microwave electron linac, started from key components' study, such as klystron and 3m long S-band accelerating structure. At the end of the 1970s, he acted as the leading scientist for R&D for the High Energy Accelerator Project ("87 Project"), a 50-GeV synchrotron in Beijing. At the beginning of the 1980s, he was nominated as the first director of Beijing Electron Positron Collider (BEPC) at the Institute of High Energy Physics (IHEP), which was successfully completed in 1988. During the BEPC project, he made many important decisions with Chinese colleagues, such as Collider and Synchrotron radiation machines combined to BEPC storage ring.
- In the middle of the 1980's he led a group working on a linac-based free electron laser (BFEL), and which was funded as part of the State High-Tech Development Plan ("863 Program"). In 1993, BFEL was successfully lasing with saturation, which was the first linac-based free electron laser in Asia. In 2000, he proposed a concept of compact linac with klystrons working as both electron source and rf source. After four years of hard work, the principle was proven, and the accelerator obtained a patent in China.
- In Professor Xie Jialin's scientific career, he paid great attention to his Ph.D. students and to training the next generation, and also to international collaborations, which had a great impact afterwards As for scientific vision, as always, he paid great attention to new frontier of high-energy physics accelerators and technologies, such ILC, superconducting rf accelerator technologies and laser plasma acceleration.



Nishikawa Tetsuji (1926-2010)

- Nishikawa Tetsuji, former director-general of KEK, showed an extraordinary talent as a physics student and became a professor of physics of the same university in 1961 at the age of 34. He was a man of extraordinarily wide interests. His initial research was in the field of atomic and molecular physics using microwave technology but he gradually shifted towards accelerator science and high-energy physics. One of his contributions to accelerator physics is the invention of the alternating periodic structure (APS) for linear accelerators, work done while he was at Brookhaven National Laboratory (1964-1966). He became a world expert on beam dynamics of linear accelerators.
- He was a man of extraordinary patience. After a decade of negotiations with the government and of tireless discussions within the scientific community during the 1960s, high-energy physicists, led by Shigeki Suwa and Nishikawa, finally succeeded in starting KEK (the National Laboratory for High Energy Physics, now called the High Energy Accelerator Research Organization) in 1969 and in constructing the 12-GeV proton synchrotron. One of the most important contributions that this accelerator has made to high-energy physics is the first long-baseline neutrino experiment in which a neutrino beam was sent to the Kamiokande facility 200 km from KEK. This finally confirmed the oscillation of muon-neutrinos to electron-or tau-neutrinos. Moreover, KEK became a model in Japan for the development of national inter-university research institutes. Later, many research laboratories in different disciplines were created with the same organizational and management structure as KEK.
- He was a man of extraordinary insight into the future. Nishikawa supported the development of a neutron beam from the KEK proton synchrotron, as initially suggested by a group at Tohoku University led by Motoharu Kimura. The KEK parasitic neutron facility was completed in 1980 and eventually upgraded substantially in the current Japan Proton Accelerator Research Complex (J-PARC).
- Nishikawa also realized the importance of hadron beams in cancer treatment and, together with the medical school of Tsukuba University, he constructed a cancer-treatment facility at the booster synchrotron (500 MeV). The success of this facility continued with the construction of the National example is his insight into synchrotron radiation facilities. The world's first dedicated synchrotron radiation facility was built at the Institute for Nuclear Study in the University of Tokyo, based largely on the foresight of Taizo Sasaki. Nishikawa decided to build the KEK Photon Factory, together with Kazutake Kora, with strong support from the synchrotron radiation user-community. The facility was completed in 1982.
- He was a man of extraordinary wisdom in laboratory management and project design. After the completion of the KEK Photon Factoryhe decided to build TRISTAN, the world's highest energy e+e–collider. The KEK photon factory injector linac was used as an injector for TRISTAN, which was completed in 1986. The collider was later transformed into a B-Factory, namely, KEKB.
- He was an extraordinary human being. Together with Shigeki Suwa, he was one of the founding fathers of KEK and the Japanese high-energy physics community. What he accomplished in Japan is comparable to what Panofsky did in the US. Indeed, Nishikawa and Panofsky were good friends and together, more than 30 years ago, they initiated the US-Japan Collaboration scheme. They also worked hard to launch the Superconducting Super Collider; unfortunately, the project was cancelled during its construction. Nishikawa Tetsuji passed away on 15 December 2010.



Sir Mark Oliphant AC, KBE, FRS

(1901-2000)

- Born Marcus Laurence Elwin Oliphant in Adelaide in 1901, the eldest son of a public servant, he rose to prominence as an inventive and brilliant physicist and carried his impressive achievements over into public life. As a physicist his crowning achievements include the invention of the synchrotron particle accelerator, the discovery of tritium and helium-3 and overseeing the development of radar. In public life and as a scientific leader he held several significant positions. These included the founding Director of the Research School of Physical Sciences at the newly constituted Australian National University (1950) and Governor of South Australia (1972) – a role in which he was very popular with the public. However, the achievement Oliphant was most proud of was the role he played in founding the Australian Academy of Science of which he was its first President in 1954.
- Like so many Australian scientists, Oliphant travelled overseas to make his mark in the world. He returned later in life bringing back his "fire in the belly" to inspire people to greater heights in his home country. After completing his education at Adelaide University, he joined the famed Cavendish Laboratories at Cambridge in 1927, which was then led by Ernest Rutherford – a fellow Antipodean who was to become a father figure to Oliphant. Together they were pioneers in the new field of Nuclear Physics.
- Their careful experiments on the "basement accelerator" that Oliphant designed and built established him as an accelerator physicist and enabled them to split the atom to discover the two new isotopes tritium and helium-3. In 1937 he took up his own Professorship at Birmingham University where he led the team that invented the magnetron, a compact power source that made it possible to carry radar in aircraft.
- In 1941 he went to the US to persuade their government to hasten a fission bomb program resulting in the Manhattan Project which he later joined. The use of the atomic bomb on civilians horrified him into becoming a lifelong "belligerent pacifist".
- While in the US, Oliphant was deputy to Ernest Lawrence at the University of California Radiation Laboratory. On assignment at the experimental electromagnetic separation plant at Oak Ridge, Tennessee, he did many night shifts during which time he penned a memo titled "The Acceleration of Particles to Very High Energies." In this little known letter to the Directorate of Atomic Energy, UK, he outlined his "new method" – the principle of the synchrotron accelerator. Using the newly invented principle Oliphant later designed and built a 1 GeV proton synchrotron in Birmingham. At the heart of the Australian Synchrotron is a 3 GeV electron synchrotron accelerator which has been in operation since 2007.
- Sir Mark Oliphant died in Canberra in 2000 aged 98.



Hogil Kim (1933-1994)

- Professor Hogil Kim, first President of POSTECH, was a physicist and an educator. Thanks to his tireless work he brought the first large-scale particle accelerator project to Korea, which now has a flourishing accelerator community. Born in Andong, Korea in 1933, Professor Kim studied at the Physics Department of Seoul National University, which had been evacuated to Busan during the Korean War. After his studies he became an officer in the Korean Air Force, teaching physics at the Korea Air Force Academy. He joined the research staff at the Korea Atomic Energy Research Institute in 1959, where he was a member of a team constructing a Cockcroft-Walton accelerator for fusion neutron research. He was selected as an IAEA fellow for advanced study at Birmingham University in UK in 1962. He earned his Ph.D. degree on cyclotron research in 1964.
- Professor Kim worked at Lawrence Berkeley National Laboratory (LBNL) from 1964 to 1966, where he invented Kim's coil for beam extraction in cyclotrons. He then joined the faculty of the Physics Department at the University of Maryland in 1966, and became part of the team building the UM Cyclotron. He initiated the Electron Ring Accelerator (ERA) project, supported by the National Science Foundation. After demonstrating successful stopping electrons rings and loading ions for collective acceleration, he moved back to LBNL in 1978.
- Although a successful scientist in the United States, Professor Kim returned to Korea in 1983 to establish what is now the Yonam Institute of Digital Technology in Jinju, Korea. A few years later he was approached by the steel company POSCO to help establish a research-oriented university in Pohang, Korea. Professor Kim had a vision of establishing a world-class university with excellent instruction and research.He proposed that POSCO help fund the building of a 2.0-GeV third generation light source on campus
- Pohang University of Science and Technology (POSTECH) was established in 1986 with Professor Kim as its founding president. The Pohang Light Source (PLS) Project started in 1988, Korea's first large-scale scientific facility with support from a private company. Sadly, Professor Kim did not live to see the commissioning of PLS in 1994. He witnessed the beam acceleration in the injector linac a few weeks before he died tragically in an accident at a sporting event at POSTECH on April 30, 1994. Hogil Kim was a pioneering leader and educator, promoting the development of accelerator science and science and technology education in Korea.

Student Grants

• Student Program

Thanks for sponsorship supported by laboratories and institutions in Asia, Europe, and Americas. A number of grants will be offered to students in the field of accelerator science to attend the IPAC'22. The grants will include a waiver of the conference registration fee and per diem allowance for accommodation and food while attending the conference.

• Grant recipients

- Must present their work in the special student poster session on the Sunday afternoon preceding the conference,
- Must submit a contribution to the proceedings, and
- Must be volunteer to act as scientific secretaries (assisting the Session Chairs/running microphones) during one or two sessions.

• Coordinators

- Local: Siriwan Krainara (SLRI, Thailand)
- Asia: Eugene Tan (ANSTO, Australia)
- Europe: Rogelio Tomas (CERN, Switzerland) and James A. Clarke (STFC, United Kingdom)
- America's: Oliver Kester (TRIUMF, Canada)

- **Recipients by Regions**

Asia

Tripathi, Puneet	Inter University Accelerator Centre
Jaikaew, Phanthip	Chiang Mai University
Kitisri, Pitchayapak	Chiang Mai University
Upadhyay, Nirupama	University of Mumbai
Kong, Defeng	Peking University
Kim, Chanmi	Korea University Sejong Campus
Lin, Chuntao	Institute of High Energy Physics
Zhang, Xuanhao	The University of Melbourne
Deng, Youming	Shanghai Institute of Applied Physics
Cheng, Hao	Peking University
Yang, Xing	Shanghai Institute of Applied Physics
Sukara, Supasin	Chiang Mai University
Abe, Yuki	Sokendai, the Graduate University for Advanced Studies
Hwang, Jongmo	Korea University Sejong Campus
Popov, Konstantin	Sokendai, the Graduate University for Advanced Studies
Yang, Tong	Peking University
Li, Yuze	Peking University
Yi, Man	Institute of Modern Physics, Chinese Academy of Sciences
Shi, Xueyan	Peking University
Yan, Yang	Waseda University
Murakoshi, Kota	Devi Ahilya University
Khan, Saif Mohd	Kurukshetra University
Gupta, Divya	The University of Melbourne
Williams, Scott	Iranian Light Source Facility
Talebi motlagh, Saeid	Inter University Accelerator Centre

Europe

Tirsi, Prebibaj	Goethe Universität Frankfurt / CERN
Felix, Soubelet	European Organization for Nuclear Research (CERN)
Wietse, Van Goethem	European Organization for Nuclear Research (CERN)
Natalia, Triantafyllou	The University of Liverpool / CERN
Elisabetta, Parozzi	Universita Milano Bicocca / CERN
Barbara, Humann	Vienna University of Technology
Carlo Emilio, Montanari	Bologna University
Vivek, Maradia	Paul Scherrer Institut (PSI)
Reza, Bazrafshan	Deutsches Elektronen Synchrotron (DESY)
Roman, Ovsiannikov	V.N. Karazin, Kharkiv National University
Ollier, Randy	Synchrotron SOLEIL

Max Joseph, Kellermeier	Deutsches Elektronen Synchrotron (DESY)
Watanyu, Foosang	Synchrotron SOLEIL
Sebastian, Richter	Karlsruhe Institute of Technology (KIT) / CERN
Sonja, Jaster-Merz	Deutsches Elektronen-Synchrotron (DESY)
Carlo Alberto, Mussolini	European Organization for Nuclear Research (CERN)
Joschua, Dilly	European Organization for Nuclear Research (CERN)
Sami, Habet	Thomas Jefferson National Accelerator Facility (Jefferson Lab)
Tobias, Kroh	Deutsches Elektronen Synchrotron (DESY)
Michail, Zampetakis	European Organization for Nuclear Research (CERN)
Collette, Pakuza	University of Oxford
Hannah, Norman	Cockcroft Institute, University of Manchester
Sara, Benitez Berrocal	University of Huddersfield / CERN
Vladisavlevici, Iuliana-Mariana	West University of Timisoara / Centre Lasers Intenses et Applications (CELIA)
Jake, Flowerdew	University of Oxford
Loic, Coyle	European Organization for Nuclear Research (CERN)
Kantaphon, Damminsek	Karlsruhe Institute of Technology (KIT)
Pablo, Martinez-Reviriego	Instituto de Física Corpuscular (IFIC)
Philipp, Niedermayer	Geothe University Frankfurt / GSI Helmholtzzentrum für Schwerionenforschung GmbH
Jens, Schaefer	Karlsruhe Institute of Technology (KIT)
Rongrong, Cai	European Organization for Nuclear Research (CERN)

Americas

Neil, Stilin	Cornell University (CLASSE)
Gabriel, Gaitan	Cornell University (CLASSE)
Cristhian, Gonzalez-Ortiz	Michigan State University
Nicole, Verboncoeur	Cornell University (CLASSE)
Bhawin, Dhital	Old Dominion University
Murilo, Alves	Brazilian Synchrotron Light Laboratory (LNLS)
Sunil, Pokharel	Old Dominion University
David, Greene	Michigan State University / FRIB
Isurumali, Neththikumara	Old Dominion University
Samuel, Levenson	Cornell University (CLASSE)
Andrew, Fisher	University of California, Los Angeles
Sophie, Crisp	University of California, Los Angeles
Annika, Gabriel	University of California Santa Cruz / SLAC National Accelerator Laboratory
Jorge, Diaz Cruz	University of New Mexico / SLAC National Accelerator Laboratory
Keegan, Harrig	University of California, Davis

- **Student Grants Sponsors**

Asia Region

Thanks to the sponsorship from the IPAC'22 Conference, SLRI, IPAC'19, and ANSTO.

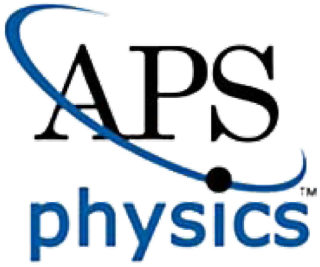
Europe Region

Thanks to the sponsorship from the European Physical Society Accelerator Group (EPS-AG), GSI, CNRS/IN2P3, INFN/LNL, CERN, DESY, PSI, CEA Saclay, ELETTRA, CELLS/ALBA, HZB, ESS, Cockcroft Institute, KIT, SOLEIL, ESRF, STFC/DL/ASTeC, MAX IV, and FZJ.



Americas Region

Thanks to the sponsorship from the American Physical Society Division of Physics of Beams (APS-DB), ODU, CLS, SLAC, FRIB, and Jefferson Lab.













Student Poster Session

Hours & Location

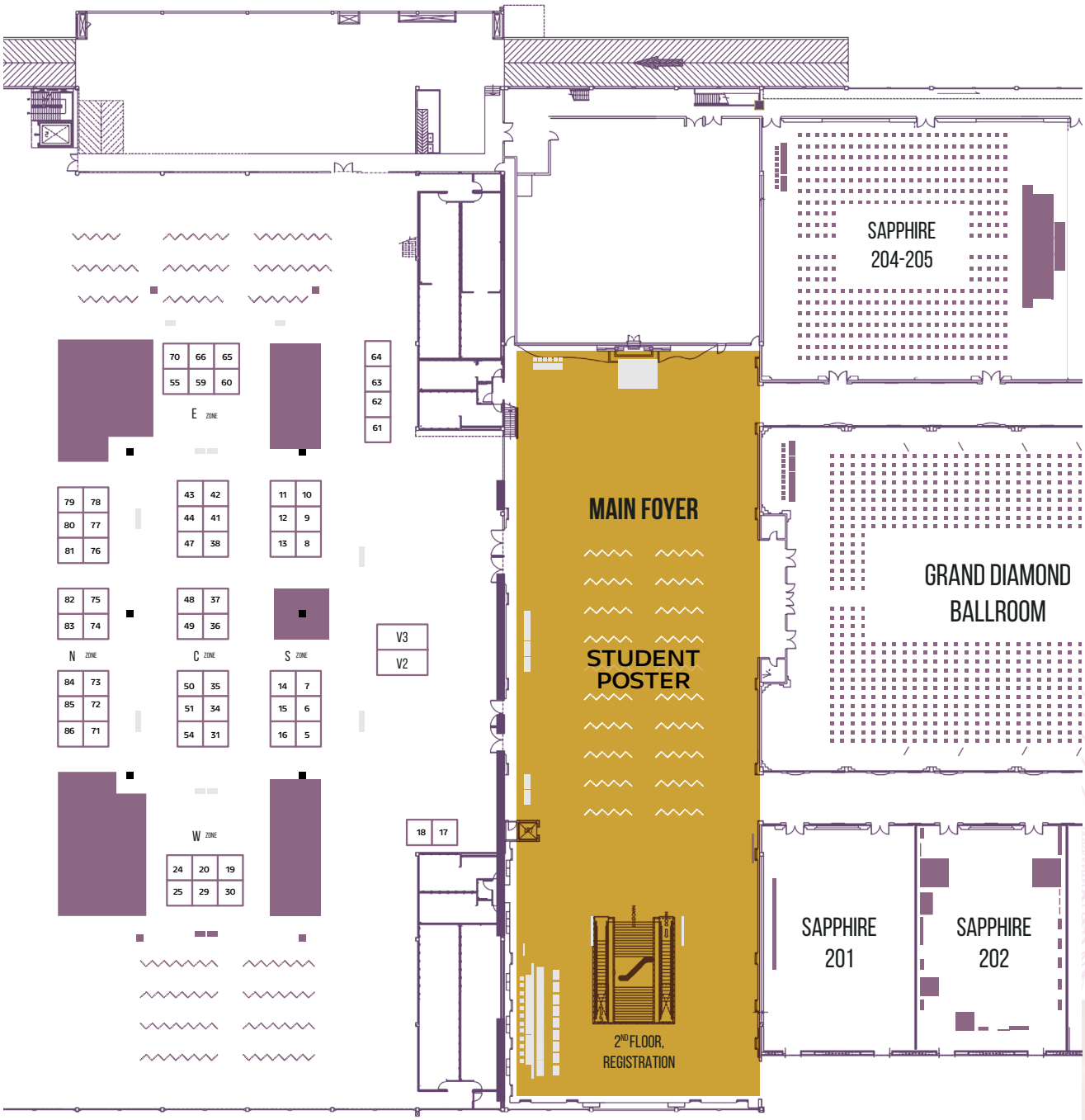
Sunday, June 12: 14:00 to 18:00 (setup: 13:30 – 14:00)

- The student poster session will be held on Sunday, June 12 at main foyer, in front of Grand Diamond Ballroom.
- Posters should be set up at 13:30–14:00.
- Students should present at their posters for presentation and interaction with judges and arrived conference delegates at 14:00–18:00.
- All students presenting a poster at the conference are encouraged to present their work in this session.
- All students receiving grants to attend the conference must present their works in this session and must submit contribution to the proceedings.
- Student posters are presented twice during the conference, once during the student poster session, and once during the standard poster sessions.

Prizes & Judging

- The student poster session is separate from the main poster session and is an opportunity to showcase your work. During the student poster session, posters will be evaluated for the Student Poster Prize by members of the IPAC'22 SPC, OC, and LOC. All students should attend their posters for interactions with judges and arriving conference delegates between 14:00 – 18:00.
- The evaluation committee will judge and decide the winners of two conference prizes for the best student posters, which will be awarded US $500. Main criteria for the best poster selection are presentation and clarity, the student's contribution, and scientific and technical merit. The prizes will be presented during the IPAC'22 Accelerator Prizes Special Session on Thursday, June 16, 2022.
- All delegates and exhibitors are encouraged to visit the student poster session.

Floor Plan for Student Poster Session



Scientific Program Information

The scientific program is proposed by a Scientific Program Committee (SPC), in collaboration with the Organizing Committee (OC) with significant input from a Scientific Advisory Board (SAB).

The scientific program includes:

- 30-minute invited oral presentations,
- 20-minute contributed oral presentations (decided by the SPC on the basis of abstracts submitted in response to the call for papers) and
- Poster sessions from each afternoon from Monday to Thursday.

Since poster sessions are a focal point of the conference, and with the objective of making them as attractive, successful and rewarding as possible, no oral presentations are scheduled in parallel with the poster sessions to allow delegates to follow the full conference program.

Questions concerning the scientific program may be addressed to the SPC Chair, Hitoshi Tanaka (tanaka@spring8.or.jp) or the Scientific Secretariat, Prapaiwan Sunwong (scientific.secretariat@slri.or.th).

• Opening and Closing Plenary

Opening Plenary : Dr. Charles Christian Polly

Charles Christian Polly is currently a senior physicist and the Muon g-2 spokesperson at the Fermilab in the United States of America. He completed his undergraduate education from Missouri University of Science and Technology, Rolla and later received his Ph.D from University of Illinois Urbana-Champaign in 2005. After that, he spent his time in 2005-2008 for his postdoctoral research at Indiana University Cyclotron Facility (IUCF). Polly is being recognized for his work on Muon g-2 at Fermilab. He has contributed his hard efforts for many experiments on the Muon g-2 and many work results are on international publications. As the Muon g-2 spokesperson, Polly has played a wide ranging and challenging role including providing guidance to complete the experiment's goals and promoting experiment outside Fermilab. He is also aware that his job is to spread the excitement and importance of the physics program of the Fermilab to the public, agencies and the broader high-energy physics community.

Being recognized from his contribution to the Muon g-2 collaboration, Polly has won a Falling Walls Award in physical sciences, which honors researchers doing groundbreaking work in the observation and understanding of natural phenomena of the earth, atmosphere and space.

Closing Plenary : Professor Tomoki Nakamura

Tomoki Nakamura is currently a professor at the Laboratory for Early Solar System Evolution, Division of Earth and Planetary Materials Science, Graduate School of Science, Tohoku University in Japan. Nakamura received his BS in 1989, MS in 1991, and doctorate degree in Science in 1993 from the University of Tokyo. Later, he continued his study abroad at the Solar System Exploration Division, National Aeronautics and Space Administration (NASA/JSC) and Max Planck Institute for Chemie at Mainz in Germany. Nakamura was appointed as an associate professor at Kyushu University in 2001. He, later on, became a professor at Tohoku University in 2012. His research interests cover mineralogy and isotope chemistry in meteorites and interplanetary dust particles. Based on the analysis, he tries to elucidate the origin and early history of our solar system. Recently, Nakamura concentrates exclusively on the study of samples from asteroids recovered from asteroid Itokawa and Ryugu by the Hayabusa and Hayabusa2 space mission.

Opening and Closing Session Schedules & Locations

Opening: **Monday, June 13 at 17:30 – 18:40**

Chris Polly (Fermilab)

Prapaiwan Sunwong (SLRI)

Closing: **Friday, June 17 at 11:00 – 12:30**

Mike Seidel (PSI)

Manjit Dosanjh (CERN/Oxford University)

Tomoki Nakamura (Tohoku University)

Chair: Hitoshi Tanaka (RIKEN)

• Oral Sessions

IPAC'22 will open with a Plenary Session (Grand Diamond Ballroom) inclusive of three talks on Monday, June 13 at 09:00 – 10:40. The Opening Ceremony will take place at 17:30 – 18:40 with two plenary talks on Monday, June 13, presided over by H.R.H. Princess Maha Chakri Sirindhorn.

The Awards Session will take place in a Plenary Session (Grand Diamond Ballroom) on Thursday, June 16 at 14:00 – 15:00.

Two oral sessions will take place in parallel on Monday morning, June 13. They will also be in the morning and afternoon on Tuesday, June 14 and Wednesday, June 15, and in the morning on Thursday, June 16 and Friday, June 17.

• Speaker Preparation Guidelines

If you have any special requirements concerning visual aids, including movies and/or audio, please contact IPAC'22 Editorial Team in advance of the conference via email to proceeding@slri.or.th, or prior to the presentation in the Speaker Ready room as soon as possible.

NOTE:

- Slides will use the 16:9 aspect ratio.
- Presentations must be uploaded at least half a day before their scheduled time in order to allow verification and transfer to the conference A/V file server system.
- There will be absolutely no provision for authors to use their personal computers under any circumstances.
- Each invited Oral will take 25 mins + 5 mins for Q&A
- Each contributed Oral will take 15 mins + 5 mins for Q&A

Once the presentations have been uploaded to the conference server, they can be checked on the conference computers provided in the Speaker Ready room.

Slides that have been successfully captured will be published in the web version of the proceedings without further action on the part of the speaker.

Please do not hesitate to contact the Presentation Manager for any questions you may have on how to prepare your oral presentation.

Speaker Ready Room

The Speaker Ready room is at the SAPPHIRE 103 (next to Editorial Room) on the first floor. All speakers are encouraged to visit this room one day before their presentations to verify their presentation are working correctly on laptops identical to those being used in the auditorium.

Speaker Ready room hours (SAPPHIRE 103, first floor)

- Sunday, June 12: 14:00 – 17:30
- Monday, June 13 to Thursday, June 16: 08:15 – 17:00
- Friday, June 17: 08:30 – 10:30

Presentation Equipment and Software

Laptop PCs with Windows 10 will be used as computers for displaying presentations. There will be no provision for authors to use their personal computers under any circumstances. The Keynote Address will not be a presentation option, only PowerPoint and PDF.

Software will be pre-installed on the computers for the presentations include MS Office Power Point 2016, Firefox, Chrome and Adobe Acrobat 2017.

On a podium, a speaker will be presented with a screen displaying speaker's presentation and Logitech spotlight® to function as pointer and remote control for slide advancement.

Preparation of Presentation Slides

In addition to the presentation we require a PDF file of the presentation for inclusion in the conference proceedings.

The following precautions should be adhered to, to ensure smooth running of electronic presentations

- For PDF files, be sure to embed all fonts when preparing the PostScript and PDF files.
- For PowerPoint files, only TrueType and OpenType fonts can be embedded

1. To embed fonts in PowerPoint 2016:

    1.1 *Select File tab.*

    1.2 Save As…

    1.3 Under Tools, choose Save Options.

    1.4 Check the box for Embed fonts in the file

2. To embed fonts in PowerPoint 2010

    2.1 Select File tab.

    2.2 Choose Options.

    2.3 Under PowerPoint Options, choose Save.

    2.4 Check the box for Embed fonts in the file

3. To embed fonts in PowerPoint XP / 2007

    3.1 Select the Office Button and select Power Point Options.

    3.2 Under Save options, select the Embed fonts in the file checkbox and Embed only the characters used in the presentation.

4. To embed fonts in PowerPoint XP / 2003

4.1 On the Tools menu, click Options, and then click the Save tab.

4.2 Under Save options, select the Embed True Type fonts check box.

5. To embed fonts in PowerPoint 2000

5.1 On the File menu, click Save As.

5.2 Click the Tools menu in the toolbar at the top of the Save As dialog box.

5.3 On the menu that appears, select Embed TrueType Fonts.

5.4 Save the file as a PowerPoint Presentation

Upload of Presentations

Speakers are required to upload their presentation in exactly the same way as their contributions.

The files of the presentations should be uploaded to our fileserver as early as possible and no later than half a day before the presentation. Files should be named with the program code followed by "_talk", for example:

- MOXAA1_talk.ppt
- MOXAA1_talk.pdf

and then uploaded through the IPAC'22 SPMS Author Accounts. The program codes assigned to presentations are visible when logging into accounts, or via "Search".

Those authors who are unable to upload to the server should copy the file on to a memory stick and bring it to the Speaker Ready room or Author Reception at least one day before the presentation.

During the Presentation

The session chair assistant will help speakers with their presentations and any minor issues. For technical AV issues an auditorium, a technician will be on hand to assist. For presentation issues, the Presentation Manager will assist.

• Program Codes

All contributions to the scientific program have a program code: Day-Presentation Type-Floor Symbol

Day

SU: Sunday

MO: Monday

TU: Tuesday

WE: Wednesday

TH: Thursday

FR: Friday

Presentation Type

PLX, PLY, OPL, CPL: Plenary Talk

IX, IY, IZ: Invited Oral

(**X:** Before coffee break, **Y:** After coffee break, **Z:** Afternoon)

OX, OY, OZ: Contributed Oral

(**X:** Before coffee break, **Y:** After coffee break, **Z:** Afternoon)

PO: Poster

SP: Student Poster

Floor Symbol

GD: Grand Diamond Ballroom (main plenary)

SP: Sapphire 204-205 (secondary plenary)

ST: Poster area Somtum

PT: Poster area Padthai

TK: Poster area Tomyam Kung

MS: Poster area Matsaman

MF: Poster area Main Foyer

For example

A Wednesday morning invited oral before the coffee break in the Grand Diamond Ballroom would have the code WEIXGD.

A poster on Thursday in the Somtam area would have the code THPOST.

- **Session Chairs**

Schedule : Monday 13th Jun - Friday 17th Jun 2022

Date	Time	Location	Chair
Monday, 13th Jun	9.10-10.40	Grand Diamond Ballroom	Prapong Klysubun (SLRI)
	11.10-12.50	Grand Diamond Ballroom	Hyyong Suk (GIST)
	12.10-12.50	Sapphire 204-205	Rohan Dowd (AS - ANSTO)
Tuesday, 14th Jun	9.00-10.30	Grand Diamond Ballroom	Hirokazu Maesaka (RIKEN SPring-8 Center)
	9.00-10.30	Sapphire 204-205	Thapakron Pulampong (SLRI)
	11.00-12.30	Grand Diamond Ballroom	Tadashi Koseki (KEK)
	11.00-12.30	Sapphire 204-205	Kouichi Soutome (RIKEN)
	14.00-16.00	Grand Diamond Ballroom	Peter McIntosh (STFC/DL/ASTeC)
	14.00-16.00	Sapphire 204-205	Rogelio Tomas (CERN) (BE)
Wednesday, 15th Jun	9.00-10.30	Grand Diamond Ballroom	Xinchou Lou (IHEP)
	9.00-10.30	Sapphire 204-205	Ralph Wolfgang Assmann (DESY)
	11.00-12.30	Grand Diamond Ballroom	M.H. Moscatello (GANIL)
	11.00-12.30	Sapphire 204-205	Franz-Josef Decker (SLAC)
	14.00-14.40	Grand Diamond Ballroom	Ralph Wolfgang Assmann (DESY)
	14.00-16.20	Sapphire 204-205	Rohan Dowd (AS - ANSTO)
Thursday, 16th Jun	9.00-10.30	Grand Diamond Ballroom	Tadashi Koseki (KEK)
	9.00-10.30	Sapphire 204-205	Kouichi Soutome (RIKEN)
	11.00-12.30	Grand Diamond Ballroom	Xiaobiao Huang (SLAC)
	11.00-12.30	Sapphire 204-205	Thapakron Pulampong (SLRI)
	14.00-15.00	Grand Diamond Ballroom	Prapong Klysubun (SLRI)
Friday, 17th Jun	9.00-10.30	Grand Diamond Ballroom	Hirokazu Maesaka (RIKEN SPring-8 Center)
	9.00-10.30	Sapphire 204-205	Thapakron Pulampong (SLRI)
	11.00-12.30	Grand Diamond Ballroom	Hitoshi Tanaka (RIKEN SPring-8 Center)

• Poster Session Organization

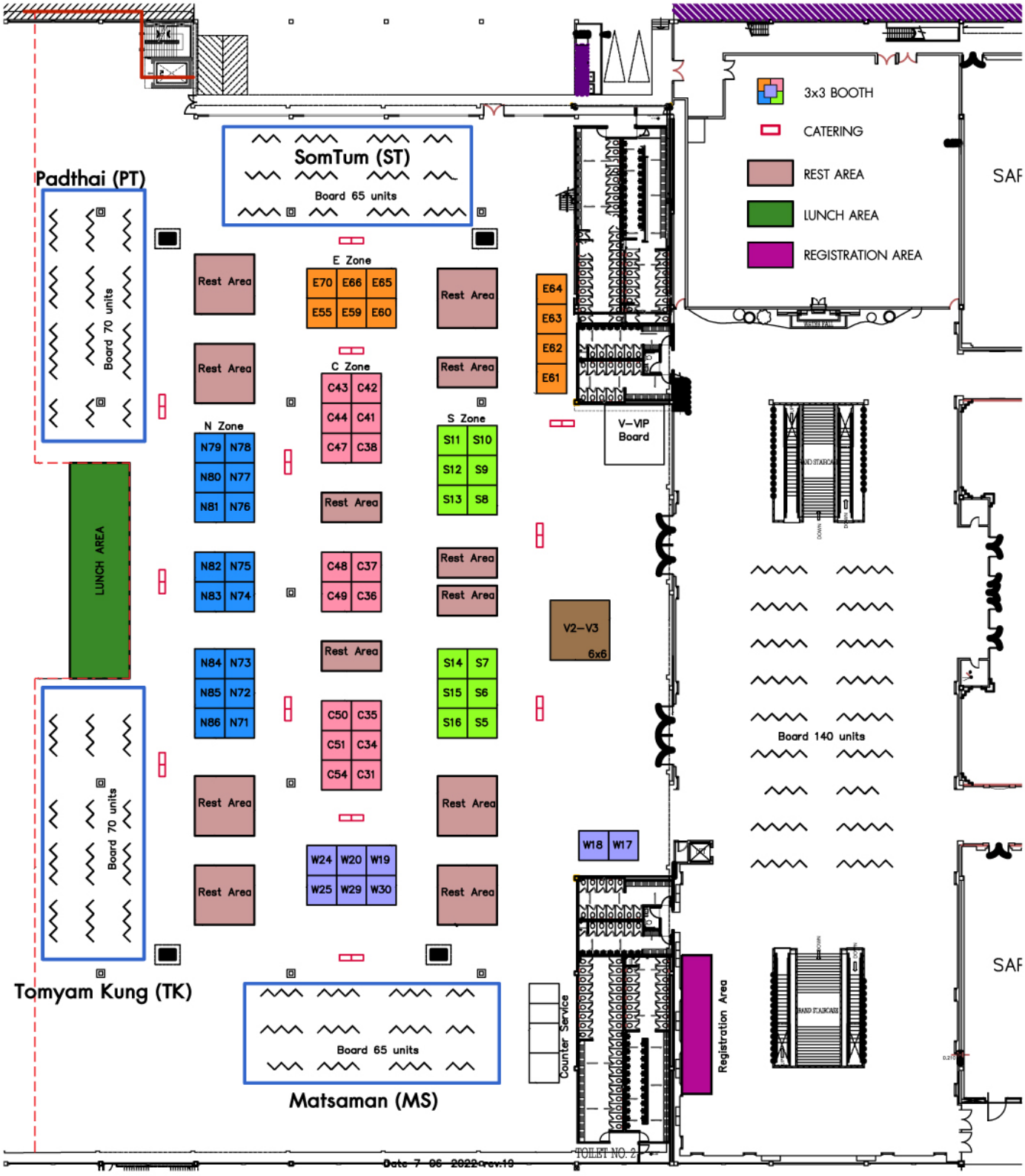
Poster Session

- Monday, May 13th : 14.00 – 16.00 (set up : 08.30 - 09.00)
- Tuesday, May 14th : 16.00 – 18.00 (set up : 08.30 - 09.00)
- Wednesday, May 15th : 16.20 -18.20 (set up : 08.30 - 09.00)
- Thursday, May 16th : 16.00 – 18.00 (set up : 08.30 - 09.00)

This poster presentation will be held in the Exhibition Area and have four color coded sections called Somtum (ST), Padthai (PT), Tomyam Kung (TK) and Matsaman (MS). You must attend to your posters through the full afternoon poster session. Setup is recommended in the morning so they may be visited during the first coffee break.

The Scientific Program Committee reserves the right to reject publication of papers that have not been properly presented or manned in the poster sessions. Manuscripts of your contributions to the proceedings (or enlargements of them) are not considered as posters and papers presented in this way will not be accepted for publication.

Exhibition Space for Poster Session Organization



IPAC2022
Entertainment

THE PAST PHOTONS

THURSDAY, JUNE 16, 2022

AT 15:00-16:00

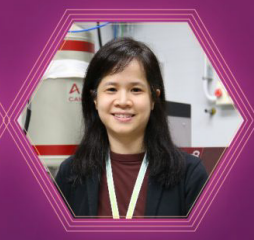
Grand Diamond Ballroom (Plenary Hall), IMPACT FORUM



Dr. Wantana Klysubun
Beamline Manager of BL8: X-ray Absorption Spectroscopy (XAS)



Dr. Catleya Rojviriya
Beamline Manager of BL1.2W: X-ray tomographic microscopy (XTM)



Dr. Prae Chirawatkul
Beamline manager of BL1.1W Multiple X-ray Techniques

Scope

Synchrotron radiation applications in archeology and history in Thailand. Speakers will share their own experiences using photon-based experiments and interpreting interesting data to disclose hidden aspects of;

- decorative glasses (19th century)
- calcareous beads (10th century)
- gold specimens (1st century)
- fossils (Paleolithic Period)



Abstract

Photons are quanta of light carrying energies and electromagnetic field that interact with all kinds of matters. Thanks to electrons inside them that absorb and/or scatter photons of specific energies letting us know to which atoms they belong, and in which structure their parent matters are formed. Therefore, photons are popular among scientists for characterizing a wide range of novel materials with promising applications for the future. What about relics? Can photons also look into the past? In Thailand, despite a countless number of artifacts being discovered, archaic inscriptions and manuscripts are very scarce. This has led to long-term collaborations between museums and Synchrotron Light Research Institute (SLRI). In this presentation, we will share our experiences using photon-based experiments and interpreting interesting data to disclose hidden aspects of decorative glasses (19th century), calcareous beads (10th century), gold specimens (5th century) and fossils (Paleolithic Period). Particularly, the SLRI glass project has been taken to the next level that we have been producing glass replica of unique ancient colors for restoration of architectural masterpieces.

Siam Photon

THAI SYNCHROTRON NATIONAL LAB

Industry Session

Topic: Particle Accelerator Technology

From Research to Industry, Present Global Overview and How to Move Forward

Date and Time: Wednesday, June 15, 2022 at 14:40 – 16:40

Venue: Grand Diamond Ballroom (Main Hall), IMPACT FORUM

Moderator:

Raffaella Geometrante (General Director of Kyma SpA)

Session Format:

The session will be conducted in a form of round table session with a moderators, and 6 speakers. Moderators and speakers will be all on the stage during the session period. Each presentation and discussion will take 10-15 minutes.

Scope and Aims:

Successful industrial engagement can be achieved by coordinated collaboration among industrial, governmental, and academic institutions. The IPAC '22 industrial session aims to bring together renowned leaders from each of these sectors involving with particle accelerator technologies and applications. The organized panel discussion will provide opportunities for valuable discussions, exchange of experiences, offer of new perspectives, expression of critical aspects regarding technology transfer, and provision of advices and suggestions for the global accelerator community.

The panel discussion will cover the following sub-topics:

- Gap analysis and policy deployment
- Innovation and startups
- Disruptive on particle accelerator technologies

The first sub-topic will focus on the bridging the gap in transferring new technologies and devices resulting from particle accelerator R&D to real-world applications including lessons learned from the past. Policies and systems used to enhance national and international collaborations in particle accelerator technology industry between public sector and industrial sector will also be addressed. Example of current collaborative projects will be provided. These discussions aim to explore effective policies and strategies for removing the barrier in transferring new knowledge and innovation from research to industrial sectors.

The second sub-topic will showcase examples of successful start-up companies related to particle accelerator technology providing opportunity for audience to discover how their innovations or products can attain widespread adoption, and what effective strategies should be utilized. The discussion will also explore the perspective of a big international company which decided to enter into the particle accelerator market.

The third sub-topic will explore opportunities for implementing disruptive technologies arising in particle accelerator R&D to industrial market. The current status and impact of disruptive particle accelerator technologies on human life such as radiotherapy, security system, machine learning, and artificial intelligence (AI) will be discussed. Case studies and disruptive innovations born from well-known laboratories will be explored. These case studies will provide practical examples of some challenges and opportunities associated with implementation of these technologies as well as potential barriers and bottlenecks. The discussion will include new technologies required in the development of particle accelerators for future industrial systems.

Agenda and Participants

• **Introduction**	Raffaella Geometrante
• **Subtopic: Gap Analysis and Policy Deployment**	
– Strategy of collaboration with industry in Thailand	Wiboon Rugsancharoenphol
• **Subtopic: Innovation and Start–Ups**	
– From "big size markets" to "small size markets"	Hans Priem
– How a small size market company can cross the chasm between a niche market towards wider industrial markets?	Enrico Braidotti
• **Subtopic: Disruptive on Particle Accelerator Technologies**	
– The quest for the miniature accelerator: wishful thinking or the key to expanding the particle accelerator market?	Maurizio Vretenar
– Present status and opportunities for implementing disruptive technologies arising in particle accelerator R&D to industrial market	Sandra Biedron
– Impact of disruptive particle accelerator technologies on human health	Suzie Sheehy
• **Closing**	Raffaella Geometrante

Satellite Event

During the period of IPAC'22, reasonable number of spaces and necessary equipment for satellite events can be arranged to support requirement of participants.

Please Note:

- Limited space is available at the conference. Reservation will be done on a first come, first served basis.
- Meeting organizers are financially responsible for any equipment needed or any damage to the premises.
- Room set up changes, catering or additional AV will be on the meeting organizers own cost.
- At the end of the meeting, the room must be left in the same condition prior to the meeting.

• IPAC'22 Satellite Meeting Schedule

Date	Time	Event Name	Location	Open/Closed
Tuesday, June 14	12:45 - 13:15	**Lunch and Learn with Industry** Our lessons learned: TRUMPF Hüttinger Industrial Solid State Power Amplifier for Scientific Customers – Technical Highlights and the Challenge of Customization By TRUMPF Hüttinger GmbH	Sapphire 105	Open (50 participants)
	13:15 - 13:45	**Lunch and Learn with Industry** Building an accelerator control system - industry best practices By Cosylab	Sapphire 105	Open (50 participants)
	14:00 - 18:00	**Film "The fantastic journey of particles in an accelerator"** The film duration 14 min in a loop.	Sapphire 106	Open (80 participants)
Wednesday, 15 June	10:00 - 17:00	**Symposium "Join us for day of education and exploration with Sirepo"** By RadiaSoft, LLC	Sapphire 105	Open (50 participants)
	12:30 - 14:00	**IPACCC Meeting**	Sapphire 107	By Invitation
	18:30 - 20:00	**IPAC'22 OC2 Meeting**	Sapphire 107	By Invitation
Thursday, 16 June	13:15 - 14:00	**JACoW Stakeholder Meeting**	Sapphire 107	Open (30 participants)
Friday, 17 June	14:30 - 18:00	**IPAC'23 SPC2 Meeting**	Sapphire 107	By Invitation
Saturday, 18 June	09:00 - 18:00	**IPAC'23 SPC2 Meeting**	Sapphire 107	By Invitation

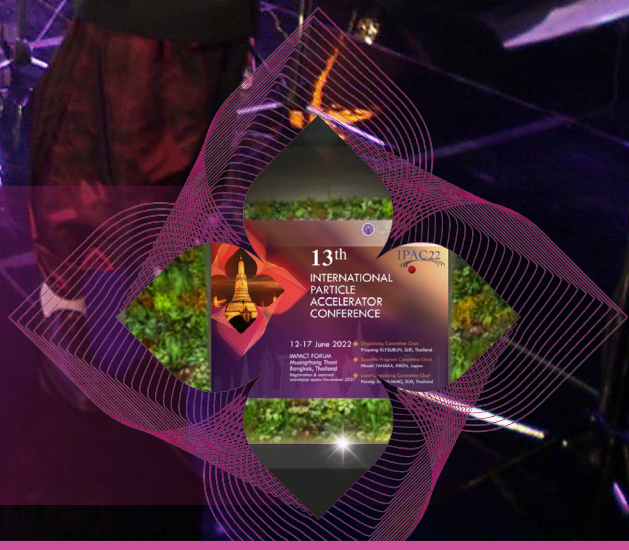
Welcome Reception

Feel the warmth of Thai hospitality and meet your industry peers.

Prepare to be delighted with a very special "Ponglang" performance from the Northeastern region of Thailand and traditional Thai music from the Jongkraben Band.



Date: Sunday, June 12, 2022
Time: 18:00 – 19:50
Location: Main Foyer
Attendees: Included in the Delegate and Accompanying Person fee



Conference Banquet

Join us

for a night of wonderful festivities.



The night will be filled with authentic Thai cultures - from famous street food, traditional puppet performances, dances, to a fiery Muay Thai show. Enjoy music from the band "Trix 'O' Treat," and end the night with a bang with DJ Mizz Ramon.

Date: Thursday, June 16, 2022
Time: 18:00 – 20:30
Location: Royal Jubilee Ballroom
Attendees: Included in the Delegate and Accompanying Person fee

Laboratory Tours

• Siam Photon Laboratory Tours

The tour of Siam Photon Laboratory (SPL Tour), will be on Saturday, June 18, 2022, after the scenes at Synchrotron Light Research Institute (SLRI), Nakhon Ratchasima. Tour participants will see how Siam Photon Laboratory plays an important role in supporting Thailand, ASEAN countries and countries in other regions with synchrotron application research.

Siam Photon Laboratory (SPL) is located at SLRI, Nakhon Ratchasima where is 252 kms. from Bangkok. The tour will take approximately 9 hours (round-trip). The bus is scheduled to leave the conference venue at 7:30 a.m. with an anticipated arriving time around 5:30 p.m. at the IMPACT, Nonthaburi.

The tour can allocate only 150 slots and they will be on the first-come, first-served basis.

NOTE:

- Date

  - Saturday, June 18, 2022

- Venue

  - Siam Photon Laboratory, Synchrotron Light Research Institute (Public Organization),

    Nakhon Ratchasima Province

- Time

  - 11.30 a.m. – 2.30 p.m.

    30 minutes for SLRI Overview and 1.30 hrs. for SPL Tour

- The Cost for the Tour

  - 1,500 Baht (The tour fee includes round-trip transportation by bus, 2 refreshments, lunch)

- Dress Code

  - Casual dress with comfortable shoes. (Sandal or slipper is not recommended.)

- Break and Lunch

  - 2 refreshments will be served in a bus during travelling.

  Lunch will be arranged at SLRI at 12.00.

- Travel

  - By air-conditioned bus

• Important information

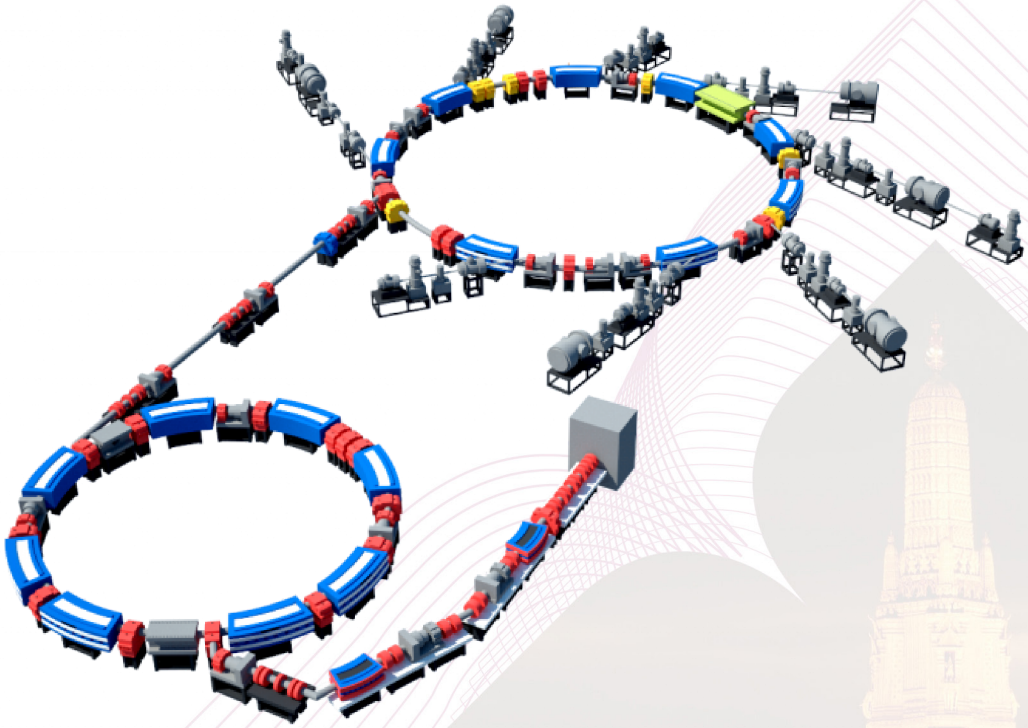
Siam Photon Laboratory

Siam Photon Laboratory is the 1.2 GeV electron storage ring, serving more than 500 projects each year on its 12 beamlines. Operating for users since 2003, SPL is the first synchrotron light source in Thailand and providing synchrotron radiation and total solutions for users from academic and industrial sectors. We are the ASEAN's leader in synchrotron science supporting food, agricultural, and industrial development.

As the host of the IPAC '22, we are proud to offer a behind-the-scenes look at SPL facilities. IPAC delegates will have unprecedented access to the accelerator and a chance to see firsthand some of the amazing research being done.

Synchrotron Radiation Generation

Synchrotron radiation facility, or synchrotron light source, produces synchrotron light by accelerating charged particles, mostly electrons due to their light weight, thus making it easier to accelerate, to nearly the speed of light. These relativistic electrons are then deflected by a magnetic field, causing them to lose some of their energy in the form of an electromagnetic wave, i.e. synchrotron light, in the direction tangential to their orbit. The generated light is then transported to an experimental station via a photon beamline.



• Components of the Siam Photon Source

1. Electron gun

Electron beam is produced by the electron gun via thermionic process, that is, the gun filament is heated by the applied electric current causing electrons to be released. These electrons are then 'pulled' toward the linear accelerator by an applied electric field.

2. Linear accelerators

Electron beam from the electron gun is then accelerated by two 20 MeV (20 million electron volts) linear accelerators, or linacs for short. After passing through the two accelerating structures, the 40 MeV electrons then enter the booster synchrotron via the low-energy beam transport line (LBT) for further acceleration.

3. Booster synchrotron

The booster synchrotron accelerates 40 MeV low energy electrons to 1.0 GeV (1 billion electron volts). Each round an electron circulates in the booster ring it gains incremental energy through applied radio wave inside the radio-frequency (RF) cavity. To attain 1.0 GeV energy electrons must circulate approximately 4 million turns in the booster, although the whole process lasts merely 0.6 seconds.

4. Storage ring

The 1.0 GeV electrons are then sent to the storage ring to be further accelerated up to 1.2 GeV. After this energy ramping process the electrons are stored in the ring to produce synchrotron radiation.

5. Insertion device

Insertion devices are specially designed magnetic systems installed or 'inserted' into the electron storage ring to produce synchrotron radiation with specific properties. These magnets are able to generate synchrotron light with higher brightness, or higher energy, or both. They can also be designed to produce synchrotron light with specific polarization, i.e. circular or elliptical polarization.

6. Photon beamlines

Synchrotron light is carried to the experimental stations via photon beamlines. The two most important components of a photon beamline are the monochromator and focusing elements. Mirrors are used to focus the photon beam to a small area of interest while retaining the available photon fluxes. Monochromator is used to select the photon energy suitable for a particular experiment. Each beamline has different components and setups depending on the photon energy range to be used and type of experiment to be carried out.

7. Experimental stations

Experimental station is where the sample to be studied is located. A great number of measurements and experiments can be set up to utilize the generated synchrotron radiation. Data from the interaction processes between light and matter is then collected for subsequent analyses. Measurement techniques utilizing synchrotron radiation have been proven to be invaluable in researches in a wide variety of disciplines, including physical science, biological science, materials science, agriculture, archaeology, environmental science, among others.

• SPL Visitor Safety Information

SLRI Safety Policy

Synchrotron Light Research Institute realizes that safety, occupational health, and workplace environment are vital to both SLRI colleagues and visitors. Therefore, the institute hereby develops the Policy on Safety, Occupational Health, and Workplace Environment to be applied as preventive measures and safety procedures for prevention of occupational hazards. The Policy is also expected to highly increase effectiveness in organization management and control in safety, occupational health, and workplace environment that, consequently, leads to safe performance, good quality of life as well as lower environmental impact.

Radiation Protection

The goal of SLRI radiation safety is to control the radiation dose as low as reasonably achievable according to the principle of ALARA. We use three factors to maintain this principle i.e., time, distance, and shielding. Radiation dose must be controlled under the dose limit value and complied with the International Commision on Radiological Protection (ICRP) regulations.

Personnel Radiation Monitoring

SLRI provides personnel electronic dosimeters to visitors or the representative persons to have their radiation dose level measured. While visitors are in radiation area, they are required to always use personnel electronic dosimeters. The radiation dose level received should not exceed 7 micro-sievert per hour.

Women with Pregnancy

Pregnant woman is not allowed to access the Experimental Hall. She must not expose to any level of radiation which may pose hazard to her fetus.

Persons Under the Age of 16

A Person who is less than 16 years old is not allowed to radiation area (Experiment Station, Storage Ring, Synchrotron Room). Persons at the age of 16-18 must be closely supervised by supervisor during visiting in radiation area.

Personal Protective Equipment and Safety Equipment

SLRI provides personal protective equipment (PPE) i.e., safety goggles, chemical protective gloves, masks, face shields, etc. for visitors' use. Related colleagues at SLRI must wear protective equipment appropriate to each task to prevent possible hazards.

First Aid

A first aid bag, containing first aid supplies, can be found at various points around in Experimental Hall area. In case of severity injury levels, visitors are required to contact SLRI safety staff immediately.

No Smoking

SLRI strictly implements NO SMOKING policy inside all buildings, except for at the provided smoking areas outside the buildings. Please notice smoking area signs.

Emergency-fire Alarm

Emergency-fire alarm is signaled by a loud bell. When the alarm sounds, everyone is required to immediately evacuate to the assembly point at SLRI parking lot until the situation is back to normal.

Emergency Evacuation from the Building

If the emergency fire alarm sounds:

Immediately evacuate from a building via the nearest exit

Do not use elevators. Use stairs only.

Do not run, just walk.

Gather at assembly point immediately.

Personal Health Condition

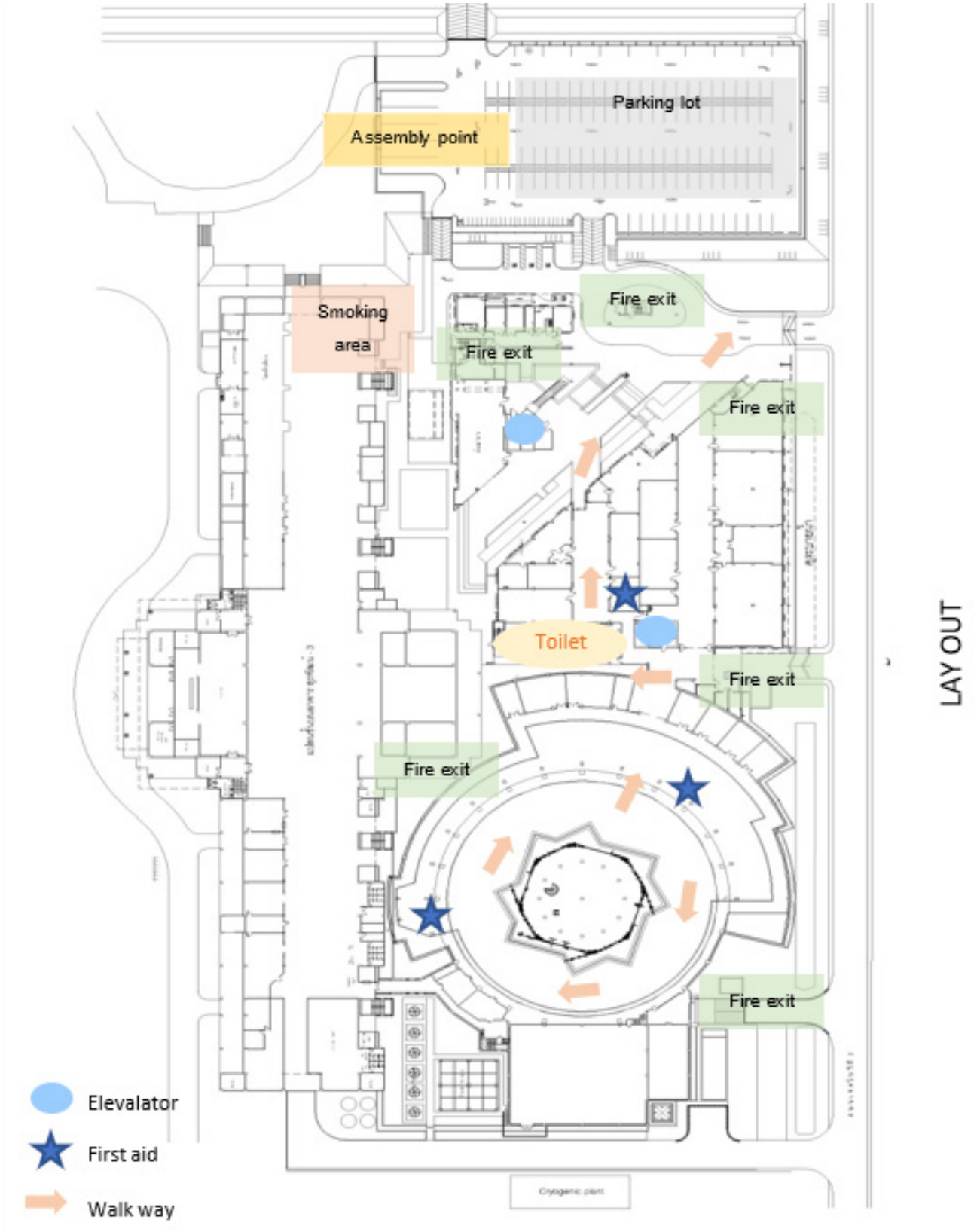
Visitors who have been fitted with the following medical devices must inform SLRI safety staff on arrival:

- a cardiac pacemaker or implantable defibrillator
- a catheter that has metal components
- a metal clip placed to prevent bleeding from an intracranial aneurysm
- a medication pump (such as that used to deliver insulin or a pain-relieving drug)
- a cochlear (inner ear) implant

Please inform SLRI safety staff.

Further Information

If you have any question about safety, do not hesitate to contact SLRI safety staff at phone No. +66 44217040 Ext. 1555 or e-mail safety@slri.or.th



Lunch and Learn with Industry

IPAC'22 will provide a Lunch & Learn Session for industrial speakers to present and discuss on their innovations and research products as non-commercial talks. This event aims to facilitate informal interactions between accelerator scientists, engineers, students and industrial partners and encourage the exchange of information and ideas across the broad spectrum of accelerator science and technology.

TRUMPF Hüttinger Industrial Solid State Power Amplifier for Scientific Customers

Technical Highlights and the Challenge of Customization

Tuesday, June 14, 2022 at 12:45 – 13:15

Sapphire 105, 1st Floor of IMPACT FORUM Building

- **Speakers:** Marcus Lau, Jens Weber, TRUMPF Hüttinger GmbH

- **Moderator:** Dr. Nawin Junthong

- **Topic:**

Our lessons learned: TRUMPF Hüttinger Industrial Solid State Power Amplifier for Scientific Customers – Technical Highlights and the Challenge of Customization

- **Abstract**

RF power amplifier systems based on solid-state technology with power levels of several 100kW require combining of a large number of transistor amplifiers. It is known that for this the signals of each individual amplifier must be well matched in amplitude and phase. In addition, also driver stages, circulators, and power combiners are subject to tight tolerances. For a reproducible series production of large quantities this brings the challenge, to guarantee this performance across operating conditions and production samples. Such low tolerance values are typically only achieved by enormous tuning efforts during production. Nevertheless, the remaining tolerances of the different stages can still accumulate in a significant extend. We developed a fully automated calibration technique with superior performance at reduces production efforts for improving the overall system performance. Any imbalances within the entire signal chain are compensated, and individual power levels of each transistor and their status is monitored. To facilitate maintenance, RF building blocks that automatically restore their system balance can be replaced. Attention needs to be paid to circulators at low frequencies since they tend to drift in directivity and impedance. For overcoming this, we developed a tracking technique maintaining stable circulator performance over time, power, and temperature.

Building an accelerator control system – industry best practices

Tuesday, June 14, 2022 at 13:15 – 13:45

Sapphire 105, 1st Floor of IMPACT FORUM Building

- **Speakers:** Dr. Rok Hrovatin, Cosylab

- **Moderator:** Dr. Roengrut Rujanakraikarn

- **Topic:**

Building an accelerator control system – industry best practices

- **Abstract**

The integration of a control system for any modern accelerator is complex, disregarding the plant's size, purpose, or type. Besides the technical and technological aspects, it must address organizational matters and various external conditions and constraints. Our talk will share insights into a typical control system integration process via some general guidelines on how to approach and conduct it. We will stress the importance of option analysis and project planning and will touch on eventual adjustments that may appear during the process. Further on, we will expose examples and assessments of critical points, and last will describe some best practices for avoiding potential pitfalls during the control system integration.

Proceedings

• Publication Types

Three types of publication, with progressively higher standards for quality and originality, will be offered for the IPAC'22 conference:

- JACoW proceedings: Publication of the conference proceedings on the JACoW website
- Light Peer Review: Publication of the refereed IPAC'22 proceedings in the Institute of Physics Journal of Physics: Conference Series

Typically, 1200 – 1400 papers are published in the JACoW proceedings.

At the IPAC'22, about 120 papers were published in the IoP proceedings.

The same paper, if it survives light peer review, may be published both in the IoP Conf series and in JACoW Conf. proc. Any citations shall be made to the IoP version. The light peer review option is offered on a first-come, first-served basis and cannot be guaranteed.

Papers accepted to the IoP Conf. series have to be reformatted compared to their JACoW counterparts.

• Expectations Upon Authors/Presenters

The scientific program will consist of invited orals, contributed orals, and poster presentations. Presenters of invited and contributed talks must provide a written paper for the proceedings in addition to any slides they might use.

All contributed papers are to be initially submitted presuming poster presentation. From these submissions, the Scientific Program Committee (SPC) will decide, on the basis of the abstracts, which papers are suitable for oral presentation. This selection occurs in February, with decisions communicated to primary authors in March.

In order to maintain the proceedings to a high standard and reasonable length, authors are reminded that only novel and original work should be submitted.

Publications are accepted only if authors participate in either a talk or poster session in person.

Any paper accepted for presentation at the conference but finally, by any reason, is not presented will be excluded from the proceedings. Furthermore, the SPC reserves the right to refuse publication of any work deemed not properly to be presented (all sessions, poster or oral).

The conference proceedings will be published on the JACoW website.

• JACoW Proceedings

In 1996, the Joint Accelerator Conferences Website, JACoW was set up for the publication of EPAC and PAC conference proceedings. As this PAC/EPAC collaboration got underway, it was joined by APAC for its first conference in 1998. Today, fifteen conference series are members of the JACoW Collaboration: ABDW (HB, FLS, ERL, eeFACT, Ecloud, Factories), COOL, Cyclotrons, IBIC (formally BIW, and DIPAC now combined into an international event), IPAC (formally the regional events APAC, EPAC, and PAC), ECRIS, FEL, HIAT, ICALEPCS, ICAP, LINAC, MEDSI, NA-PAC, PCaPAC, RuPAC, SAP, and SRF.

Each conference series agrees to adopt common templates, and to produce JACoW-compatible files of papers for publication at the site. They also agree to abide by terms of reference and boundary conditions which have been put in place to facilitate the training of JACoW editors through hands-on experience in processing during the larger conferences, and also through attendance at the annual JACoW Team Meetings where technical problems related to electronic publication are addressed.

JACoW has thus become a collaboration in electronic publication, with a Steering Committee composed of the Chairs of the past, current and future conferences in each of the above series.

Since 2004, the JACoW Collaboration has developed a Scientific Program Management System (SPMS) based on Oracle software. Originally designed to handle contributions to a scientific conference from abstract submission through to the production of the proceedings, it is now used for many of the organizational activities, as well as to manage delegate and industrial exhibition registration, refereeing and hotel accommodations.

More information on JACoW can be found at the website: www.jacow.org

• Light Peer Review Proceedings

At IPAC'22, a Light Peer Review process will offer an intermediate level of publication between a non-refereed IPAC paper (that will be published by default in the JACoW conference proceedings) and a high quality PRAB paper.

Successful peer reviewed papers will be published as part of the Institute of Physics Journal of Physics: Conference Series and therefore visible in the known publication and citation databases. The IoP Proceedings Licence Terms and Conditions can be found here.

Please note that publication in the IoP Conf. Series excludes the possibility of publication in PRAB.

We see the introduction of light peer review as an opportunity to publish papers that do not fulfil all the acceptance criteria of journals by virtue of their limited content – as is inevitable with the three-page limit. Examples of papers that may survive light peer review, but possibly not the rigour of PRAB, could include review papers, technical advancements without novel schemes, incremental design or performance improvements, and similar topics.

The papers submitted to the Peer Reviewed IPAC'22 proceedings will be reviewed by members of the Scientific Advisory Board, Organizing Committee, Scientific Program Committee, and by volunteers selected by the Scientific Program Committee. All papers are reviewed by two referees. In the event of disagreement between referees, the SPC shall resolve the case.

Due to limitations on time and number of referees, it cannot be guaranteed that all papers submitted will be reviewed. We expect that up to 120 papers will be processed on a first come, first served basis pro rata of the number of papers per Main Classification

Authors can volunteer for this new refereeing process at the time of abstract submission; and must indicate their area of specialization by Main Classification.

• Message from PRAB

Physical Review Accelerators and Beams (PRAB) is inviting papers which expand upon original research or topical reviews presented at IPAC'22.

PRAB is a peer-reviewed, all-electronic journal published by the American Physical Society (APS). Articles based on IPAC'22 papers and submitted to PRAB will be reviewed through the normal refereeing procedure. If accepted for publication, they will be published as regular PRAB articles. Publication will be timely; articles will be published as soon as they are ready.

In keeping with PRAB policy, papers must contain either important new results in science and/or technology or review active areas of accelerator and particle beam research. Papers in the first category must contain new results. Confirmation of previously published results of unusual importance can be considered as new, as can significant null results. Review articles should review active areas of research in a form that is useful to both practitioners and people entering the field. Authors are asked to give considerable attention to the presentation of their material, making introductions accessible to intermediate graduate students and readers from other fields. The body of each paper should be economically and thoughtfully organized. Papers cannot be identical duplicates of work submitted for publication either to another journal or to conference proceedings, including IPAC'22.

Material previously published, or submitted for publication, in a letters journal or in conference proceedings, and here specifically in the IPAC'22 proceedings, can be the basis of an article in PRAB if the submitted manuscript presents more information, and enables the reader to obtain an improved understanding of the subject. Note that this does not require new physics results as compared to the conference submission, but it does require more details, discussion, etc.

More information about PRAB editorial policies is available at:

http://journals.aps.org/prab/authors/editorial-policies-practices.

Industrial Exhibition

- **Hours & Setup**

DAY	EVENTS	TIMES
Sunday June 12	Exhibitor's move-in for booth set up and decoration	12:00 - 22:00
	Welcome reception	18:00 - 19:50
Monday June 13	Exhibition Area Open	08:30 - 16:30
Tuesday June 14	Exhibition Area Open	08:30 - 18:00
Wednesday June 15	Exhibition Area Open	08:30 - 18:20
Thursday June 16	Exhibition Area Open	08:30 - 18:00
	Exhibitors Move out	18:00 - 23:00

Sponsors

ScandiNova is by its break-through technology a world leader in development and production of Pulsed Power Systems with high power levels. The product range covers klystron/magnetron pulse modulators, RF units and e-gun modulators, all using solid-state technology. The solutions have a key function in radiotherapy, science, and industrial applications, with customers such as CERN and Varian Medical Systems. Thanks to our modular design we can offer systems that handle a wide range of loads and needs all the way to RF peak power of 100 MW. Reliable and high precision pulses lead to improved control, performance, significantly decreased power consumption and lower maintenance costs. ScandiNova has clients in over 45 countries, mainly in Europe, Asia and North America. The company was founded in 2001, has its head-office in Uppsala, Sweden with 100 employees and sales representatives in in key regions around the world.

Exhibitors

AFT microwave GmbH (AFT stands for Advanced Ferrite Technology) offers more than 40 years of experience serving highly sophisticated customers around the globe who are focused in the field of particle accelerators, fusion reactors, civil and defense radar systems, satellite communications, radiation therapy, security inspection and industrial heating. We are strong in deliveringsolutions for design, manufacturing and service of passive microwave components and sub-systems. Our core competency is based on in-house designed and produced microwave ferrites and ferrite based products as circulators, isolators, loads, phase shifters, fast ferrite tuners and power variators. AFT provides state-of-the-art solutions from milliwatt to megawatt: from integrated thin-film to high-power coaxial and waveguide devices. Contact: Donaustr. 18, D-71522 Backnang, Germany.

Email: sales@aft-microwave.com,

Website: https://www.aft-microwave.com/

Allied Metals Corporation is the global leader in the supply of Pure Iron for applications where performance, consistency, and cost are critical. High saturation induction, high permeability, and low coercivity allow ALLIEDPUREIRON® (~99.9% purity) to be used as yoke, pole, core, and shielding material in a variety of magnetic applications. We have the capability to supply Pure Iron in a variety of forms (sheet/plate, bar, bloom, wire, etc.) in prototype quantities up to single heats of ~300 Metric Tons. More than just being the ideal partner, we are an asset that provides value to your organization.



Ampegon and OCEM Power Electronics specialize in high energy RF amplifiers, high voltage power supplies and magnet power supplies specifically for particle accelerators and other scientific applications. From 10kW to 10MW, Ampegon and OCEM have standard products and can design/build custom solutions specifically to meet demanding specifications.



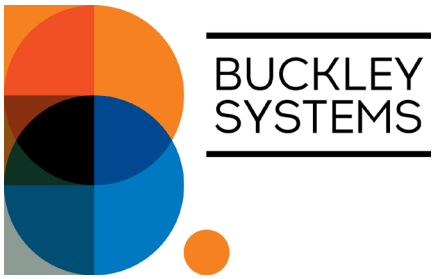
Aurion supplies plasma systems (for activation, cleaning, etching, thin film deposition), radio frequency components (impedance matching networks, filters, switches) and components and systems for particle accelerators (RF, HV, pulsing), e.g. bunch compressors, pulsed power systems, trigger amplifiers.



BERGOZ Instrumentation is a French industry, focusing on non-destructive solutions for low current and low charge measurement without disturbing beam quality. Based on 40 years of experience in particle accelerators, we provide expertise and advices to our end-users, ensuring perfect consistency between their beam requirements and our instrument performances.



Best Particle Therapy, Inc. is a member of the TeamBest® familyof companies. TeamBest® currently offers products for brachytherapy and teletherapy. TeamBest® continues to expand its product offerings to cover low tech to high tech with the primary goal of making these technologies affordable and accessible globally. Best Particle Therapy will utilize advanced state-of-the-art accelerator technologies and provide cost-effective solutions for particle therapy treatment and research.



Manufacturer of Electro-magnets of Beam Line equipment.



CAEN ELS is a leading company in the design of power supplies and state-of-the-art complete electronic systems for the Physics research world, having its main focus on dedicated solutions for the particle accelerator community and high-end industrial applications.



Cosylab provides turnkey software solutions for our planet's most complex systems, such as particle accelerators, large telescope arrays, fusion reactors, innovative medical devices and cancer therapy systems. Our technology enables organisations to achieve scientific breakthroughs, deliver better healthcare treatment today and clean energy in the future.



CPI products are used to generate high levels of microwave or radio frequency energy for equipment and accelerators used in the study of high-energy particle physics. CPI has the technology and production experience necessary to produce very high-power, high-frequency products that are customized for the scientific community's specialized needs.

Cryoelectra develops and manufactures custom designed high-quality RF products for Particle Accelerators since 1992. We are specialized in providing complete RF source solutions for all kinds of accelerators using High-Power Solid-State RF Amplifiers and digital LLRF Control Systems. Our compact industrial design is easy maintainable and built for continuous operation.

The name of 'Danfysik' is synonymous with accelerator technology. Since 1964 we have established the company's reputation as being a leading supplier of high quality equipment for particle accelerators in research laboratories and industry worldwide.

Dimtel, Inc. is a provider of analog and digital signal processing solutions for particle accelerators, with primary focus on low level RF and instability control systems. Dimtel products are in use at more than 25 facilities around the world.

D-Pace supplies products and services to the international commercial accelerator industry. Our areas of expertise include beamline systems, beam diagnostic devices, and ion sources for research, industrial, and commercial accelerator systems.



The technological knowledge and the references acquired over the years, combined with a business vocation always devoted to the development of highly customized solutions, makes, EEI the ideal partner for the realization of power systems in the fields of BIG SCIENCE.

EEI design and manufacture a complete range of Power Supplies for magnets to be used in particle accelerators. They are available in different solutions: free-standing cabinet or 19" rack unit.

EEI power supplies find multiple applications in the fields of scientific research and medicine for cancer treatments, specifically in hadrontherapy.



Elettra-Sincrotrone Trieste S.C.p.A.

Elettra is an international multidisciplinary research centre, specialized in the study of materials. Exploiting its long-standing and hands-on expertise it has proven to be a partner in the design and construction of the world's most advanced large-scale scientific infrastructures.



Elytt Energy designs and manufactures resistive and superconducting magnets and power supplies for particle accelerators of all types.

Designs and manufactures fusion reactor Toroidal and Poloidal Field coils.

Designs and manufactures standard and custom-built resistive and superconductor magnets, from small correctors, to very large magnets, 2D and 3D is used for magnetic field modelling.

Our workshops have all manufacturing facilities necessary, winding machines, vacuum system, oven, inert gas oven and all measurement equipment

The following related services are available, Mechanical calculations, Beam optical calculations, Vacuum calculation and design, On-site Installation.



Founded in 2006 and specialized in Big Science applications, EPOWERSYS can provide power electronics and electronic instrumentation for applications such as fusion and particle accelerators.

EPOWERYS provides a range of high stability commercial off-the-shelf power supplies to power resistive and superconducting magnets. Also suitable for industrial high end applications.

The company team is made up by a team of highly qualified engineers, EPOWERSYS also has the capability to design prototypes for custom applications.

EPOWERSYS is a commercial brand of the company Neureus Technologies.

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European Science Solutions company is owned, fifty and fifty, by the two most important Italian RF technology providers, DB Group and Elenos Group.

We cower technology knowledge on cavity-tube and solid state RF generators, driver amplifiers, switching power supplies.

FAGOR AUTOMATION Open to your world

High-end optical linear and angular encoders for fast and precise measuring and positioning. Based on a deep know how, patent technologies and in-house R&D in the main four technologies within an encoder, namely mechanics, optics, electronics and software. Linear models with single digit micrometric accuracy or angular within one arc-second accuracy. Attaining nanometric resolution in linear models and thousands of arc-second for angulars they can all provide immediate homing after powering the equipment and fully digital communication with the control system. Designed for a diversity of exigent positioning applications including gap control of undulators or positioning of optical elements in synchrotron stations, measuring equipment, testing rigs or integration with linear/torque motors. The product range also comprises Digital ReadOuts (DRO), CNC controls, drives and motors.

Fagor Automation is one of the top firms in the market, offering outstanding technological products for demanding applications. It stands out for the flexibility of its organization and the proximity to the clients. Looking into the future and sustainability, Fagor Automation is eager to engage in new projects that enrich the know-how, give rise to technological advantages, provide innovative solutions and exceed the expectations of our customers.

FMB BERLIN

FMB OXFORD

FMB is recognized as a leading supplier of instrumentation to the scientific community.

With more than 30 years of experience in the global synchrotron industry and operating at 2 sites – in Berlin and in Oxford – we have built a product range extending from storage ring vacuum systems to complete turnkey beamlines including all controls.

Our core competencies are the project management, design, build, test, installation and commissioning of synchrotron instrumentation. In Berlin the focus is on vacuum systems, front ends and soft x-ray beamlines. In Oxford the area of expertise is primarily hard x-ray beamline systems and components.

INSTRUMENTATION TECHNOLOGIES

Instrumentation Technologies is a high-tech company providing high-added value and project-tailored solutions (products and services) in Test & Measurement.

LIBERA is the brand name identifying the solutions in the fields of particle accelerators and nuclear research reactors. LIBERA provides off-the-shelf products, services, and customizations based on the existing products/service portfolio.



Jema offers innovative, tailor-made high performance DC power systems and radio-frequency amplifiers for customers worldwide.

Since 1937, Jema has been designing, developing, manufacturing and supplying systems to customers requiring extreme precision or using specific technologies, such as particle accelerators. Our customised solutions continuously monitor the output voltage and current to ensure that the variation from the set point is very small (less than 0.01%). We also provide high power solid state RF amplifiers to power the various resonant cavities of the accelerator.

To achieve this, we offer project driven solutions but also many customizations to best meet our customers' needs.



Kyma develops and produces advanced high-tech permanent magnets devices for the light source accelerator industry. Ex-vacuum, in-vacuum undulators and other magnetic insertion devices are our core business. Our mission is to create state-of-the-art devices and to deliver innovative technology and services that will shape and fulfil our customers' future successes.



Ultra-High Vacuum Components and Various Ceramic Materials for KYOCERA Accelerators.



Metrolab is the global market leader for precision magnetometers, used to measure strong magnetic fields with great precision.

Customers:

- MRI and magnet manufacturers
- Accelerator and calibration labs
- OEM customers

Products:

- NMR Precision Teslameters
- NMR Magnetic Field Cameras
- Precision Digital Integrators
- 3-axis Hall Magnetometers

Micromatter is a manufacturer of beam stripping foils, with specialization in diamond-like carbon, Boron hybrid and graphene foils.

Micromatter also offers CRM's and customized Ion beam calibration standards on DLC backing with advantage of ion charge collections primarily used but not limited to: X-ray (PIXE), γ-ray (PIGE) Backscatter spectrometry, Nuclear and Astro-Physics experiments to study Physics using accelerated ions.

Other applications for our XRF Standards are in air quality monitoring, precious metal testing,

WEEE/RoHS analysis and many other industrial and scientific applications.

Omega Physics provides products and services to users and industries involved in particle accelerators technologies, such as vacuum, cryogenics, fast electronics, or magnetic systems.

Nalu Scientific develops advanced mixed signal integrated circuits with applications in particle tracking and time of flight measurements.

Pantechnik has been dedicated to proudly serve particle accelerators community for almost 30 years.

Our customers are located all over the world, from big research facilities to regional physics lab, including industrial companies dedicated to health, analysis, safety.

Pantechnik was created to promote the technology of ECR ion sources.

Vacuum solutions for your accelerator applications!

For more than 125 years, Pfeiffer Vacuum has been setting standards in vacuum technology. In 2017, the Group significantly expanded its product portfolio by acquiring DREEBIT.

Thanks to the extensive know-how and line of products we can offer vacuum solutions for your accelerator applications!

Edwards is a global leader of vacuum and abatement. We are proud to lead the industry, pushing the boundaries of science to deliver innovative products which are intrinsic to everyday life, working in partnership with our customers and continually setting new standards.

PS SOLUTIONS & SERVICES is a manufacturer's representative involved in the sales & services of semiconductor manufacturing equipment, metrology tools and materials for the semiconductor wafer fabs, ic test & assembly, tft, solar, hard disk media and oil & gas industries.

R&K is a manufacturer of cutting-edge RF/microwave products. R&K's solid-state power amplifiers are powering the world's advanced accelerators for high energy physics research applications and comprehensive EMC test requirements. With a large installed base of amplifiers located in key labs worldwide, R&K is a proven provider for your power requirements.

RadiaBeam is an established team of multi-disciplinary accelerator scientists, engineers, technicians, and manufacturers who are passionate about adding value at every step. We custom design and manufacture magnets, instrumentation, RF structures, OEM linacs, and advanced radiation sources for research and industry.

RadiaSoft is a technology and consulting firm that offers state-of-the-art software development with PhD-level expertise in science and engineering. We specialize in particle- accelerator design, large-scale optimization, control systems, and Machine Learning tools.

We also offer Sirepo, a powerful Computer Aided Engineering gateway for browser-based simulations with legacy codes. With no downloads or installations, Sirepo runs on our high-performance computing environment right from a browser. Design linacs, magnets, control systems, X-rays and more, or explore our ML toolkit. Get started today and see what Sirepo can do for you.

We're here to help solve your most challenging problems in research or industry! Come and say hello at booth E65.

RI develops and manufactures high-performance components, and systems, and provides solutions for scientific and industrial applications, and customers around the globe.

RI is renowned for providing most reliable services and products ranging from prototypes and custom-tailored components, to series production and turn-key systems.

ScandiNova is by its break-through technology a world leader in development and production of Pulsed Power Systems with high power levels. The product range covers klystron/magnetron pulse modulators, RF units and e-gun modulators, all using solid-state technology. The solutions have a key function in radiotherapy, science, and industrial applications, with customers such as CERN and Varian Medical Systems. Thanks to our modular design we can offer systems that handle a wide range of loads and needs all the way to RF peak power of 100 MW. Reliable and high precision pulses lead to improved control, performance, significantly decreased power consumption and lower maintenance costs. ScandiNova has clients in over 45 countries, mainly in Europe, Asia and North America. The company was founded in 2001, has its head-office in Uppsala, Sweden with 100 employees and sales representatives in in key regions around the world.

Scanditronix Magnet has more than 25 years' experience of manufacturing magnets and coils for particle accelerators and uses that experience and professional engineering know-how to offer the complete chain of work which ranges from magnetic field calculations and CAD design to the manufacturing, assembly, testing and field mapping.

SEF Technologies designs and manufactures electromagnets used in particle accelerators (synchrotrons and linear accelerators). Based in the Toulouse, (FRANCE, EU), SEF has over 40 years' unique expertise in this high-tech sector.

With a reputation for reliability and excellence, SEF has earned the trust of leading scientific and industrial organizations such as CERN (CH), CEA, THALES, GANIL, ESRF, SOLEIL, CNRS, PANTECHNIK, IBA (BE) and ELETTRA (IT).

A trusted partner of research organisations and industry, SEF, through its products, contributes to the expansion of knowledge in a wide range of fields including fundamental research, material physics, chemistry, nanotechnologies and medicine.

Sigmaphi has been designing and manufacturing magnets and equipment for particle accelerators for 40 years. from functional design to beam commissioning.

Sigmaphi provides resistive magnets, superconducting magnets, pulsed magnets and turnkey particle beam lines for major physics labs in the world as well as for industrial and medical applications.

Solid Sealing Technology Solid Sealing Technology designs and manufactures essential electrical components for today's high-tech world. Our innovative material-joining technologies bond ceramics and glass to metal to create hermetic feedthroughs and connectors tailored for use in vacuum environments. Experts in design, SST offers a vast catalog of high-performance sealing solutions that improve reliability in demanding engineering settings. And for customers with unique challenges, SST's skilled engineering group creates fully customized parts from the ground up.

Product examples include custom Beam Position Monitoring assemblies (BPM Feedthroughs) and custom high-energy physics products for labs around the world.

We can accommodate a wide range of operating conditions and product requirements including: temperatures from -269ºC to 450ºC, voltages exceeding 125 KV, currents up to 1,000 amps, nonmagnetic materials, ultra-high vacuum environments, and high pressures. Contact us today to speak with our engineering team!

Syes is mastering Solid State technology for RF amplifiers since 40 years.

Syes designs and manufactures amplifiers for MIMS applications from 1MHz to X-band, from 1W to 1MW and more.

The centre of the design process is the customer, main engine of Syes R&D department.

tesla ENGINEERING LTD

The Tesla Engineering Ltd group of companies consist of Tesla Engineering Magnet Division, Tesla Engineering Gradient Division, Everson Tesla Incorporated and Futura Composites.

This group of companies is dedicated to the design, manufacture and support of resistive and superconducting electromagnets, gradient coils, composite materials, generator coils, motors and consultancy to the science, medical and industrial markets.

TVP

TVP is a company supported by a professional experience of more than 20 years in High Vacuum and Cryogenic technologies, offering tailored solutions for Big Science laboratories, Space, Research Centers and applied vacuum and cryogenics for industry. TVP has all capabilities from design to machining, welding and testing for the delivery of tailored solutions.

Since 2019, TVP belongs to the DIECAROS Corporation (same group as AVS Added Value Solutions), with more than 15 years of experience in space technologies, accelerators, fusion, etc.

TVP has developed projects for some of the most relevant scientific facilities worldwide, such as CERN, ESA-ESTEC, IAC, ILL, ALBA, CIEMAT, DESY or ITER.

TRUMPF

TRUMPF Hüttinger
generating confidence

TRUMPF Hüttinger is a high-tech company and a leading global manufacturer of DC, medium-frequency, high-frequency and semiconductor-based solid-state microwave generators. We generate electricity at the required frequency and power. TRUMPF Hüttinger is headquartered in Freiburg, Germany and has sales and service branches in Europe, the US and Asia.

Thailand Science Research and Innovation

Thailand Science Research and Innovation (TSRI) is a forefront public organization to foster Thailand's advancement in science, research and innovation (SRI) for sustainable, inclusive economic growth of the country.

Main missions of TSRI are:

(1) Formulate policy, strategy, and framework for science, research and innovation (SRI) programs

(2) Allocate budget according to the SRI programs and monitor and evaluate results and impact of budget spending

(3) Promote the utilisation of research findings and innovation products

ULVAC

ULVAC is a world leader in vacuum equipment and vacuum component used in the semiconductors, electronic devices, automotive parts, refrigeration and industrial parts. Which more than 15 years experience in vacuum Technology business in THAILAND and more than 70 years around the world.

VAT

PASSION. PRECISION. PURITY.

Global Market Leader

For high performance vacuum valves, mission-critical components for advanced R&D and manufacturing processes of semiconductors, LED, solar cells, displays and other high vacuum demanding products.

Visit us at booth 14.

VITZRO NEXTECH

Specialized manufacturer in Accelerator and Nuclear Fusion Devices (UHV/RF Components and Devices).

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Krerkrit Sittisard, SLRI
Prayoon Songsiriritthikul, SLRI
Visitchai Sooksrimuang, SLRI
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Sarayut Tunmee, SLRI

Note

Mon, June 13, 2022

Jun 13, 2022 09:10 - 10:40	Oral Session	Grand Diamond Ballroom

MOPLXGD - Plenary Invited Orals

MOPLXGD1 **The SuperKEKB Has Broken the World Record of the Luminosity**
Author: Yoshihiro Funakoshi (KEK, Ibaraki)

MOPLXGD2 **Progress Towards Demonstration of a Plasma Based FEL**
Author: Enrica Chiadroni (LNF-INFN, Frascati)

MOPLXGD3 **The Accelerator and Beam Physics of the g-2 Experiment**
Author: David Alberto Tarazona (Cornell University (CLASSE), Ithaca, New York)

Jun 13, 2022 11:00 - 12:10	Oral Session	Grand Diamond Ballroom

MOIYGD - Invited Orals: Novel Particle Sources and Acceleration Techniques

MOIYGD1 **Progress in Developing an Accelerator on a Chip**
Author: Robert Joel England (SLAC, Menlo Park, California), Robert L. Byer (Stanford University, Stanford, California), Peter Hommelhoff (University of Erlangen-Nuremberg, Erlangen)

MOIYGD2 **Recent Progress of Compact LAser Plasma Accelerator at Peking University**
Author: Chen Lin (PKU, Beijing)

Jun 13, 2022 12:10 - 12:50	Oral Session	Grand Diamond Ballroom

MOOYGD - Contributed Orals: Novel Particle Sources and Acceleration Techniques

MOOYGD1 **Experiments Towards High-Repetition Rate Plasma Wakefield Acceleration at FLASHForward**
Author: Gregor Loisch, Judita Beinortaite, Gregory Boyle, Richard D'Arcy, Severin Diederichs, James Matthew Garland, Carl Andreas Lindstrøm, Jens Osterhoff, Trupen Parikh, Siegfried Schreiber, Sarah Schroeder, Maxence Thévenet, Stephan Wesch (DESY, Hamburg), Matthew Wing (DESY, Hamburg; UCL, London), Pau Gonzalez-Caminal (DESY, Hamburg; Universität Hamburg, Hamburg), Brian Foster (JAI, Oxford), James Chappell (UCL, London)

MOOYGD2 **The AWAKE Experiment in 2021: Performance and Preliminary Results on Electron-Seeding of Self-Modulation**
Author: Edda Gschwendtner, Giovanni Zevi Della Porta (CERN, Meyrin), Livio Verra (CERN, Meyrin; MPI, Muenchen; TUM, Munich), Patric Muggli (MPI, Muenchen; MPI-P, München)

Jun 13, 2022 11:10 - 12:10 Oral Session Sapphire 204-205

MOYISP - Invited Orals: Beam Dynamics and EM Fields

MOIYSP1 **Machine Learning as a Tool for Online, Surrogate Modelling of Beam Dynamics**
Author: Auralee Edelen (SLAC, Menlo Park, California)

MOIYSP2 **Touschek and Intrabeam Scattering Effects in Extremely Low Emittance Storage Rings**
Author: Riccardo Bartolini (DESY, Hamburg), Michael Borland, Vadim Sajaev (ANL, Lemont, Illinois), Vladimir N. Litvinenko (BNL, Upton, New York), Simon Christian Leemann (LBNL, Berkeley), Andreas Streun (PSI, Villigen PSI), Karl Leopold Freitag Bane (SLAC, Menlo Park, California)

Jun 13, 2022 12:10 - 12:50 Oral Session Sapphire 204-205

MOOYSP - Contributed Orals: Beam Dynamics and EM Fields

MOOYSP1 **Impact of Longitudinal Gradient Dipoles on Storage Ring Performance**
Author: Frank Zimmermann, Yannis Papaphilippou, Axel Poyet (CERN, Geneva)

MOOYSP2 **Measurements of Collective Effects Related to Beam Coupling Impedance at Sirius**
Author: Fernando Henrique de Sá, Murilo Barbosa Alves, Lin Liu (LNLS, Campinas)

Jun 13, 2022 17:30 - 19:00 Oral Session Grand Diamond Ballroom

MOOPLGD - Opening Plenary

MOOPLGD1 **Growing Expectations for New Physics**
Author: Chris Polly (Fermilab, Batavia, Illinois)

MOOPLGD2 **SPS-II: A 4th Generation Synchrotron Light Source in Southeast Asia**
Author: Prapaiwan Sunwong, Prapong Klysubun, Porntip Sudmuang (SLRI, Nakhon Ratchasima)

Jun 13, 2022 14:00 - 16:00 Poster Session Poster Area Somtum

MOPOST - Poster Session - Somtam

MOPOST001 **Performance of Automated Synchrotron Lattice Optimisation Using Genetic Algorithm**
Author: Xuanhao Zhang (The University of Melbourne, Melbourne, Victoria), Suzanne L. Sheehy (ANSTO, Kirrawee DC New South Wales; The University of Melbourne, Melbourne, Victoria)

MOPOST002 **Heavy Ions Injection Complex of the Collider NICA**
Author: Sergey Kostromin, Andrey Butenko, Igor Nikolai Meshkov, Anatoly O. Sidorin, Evgeny Syresin, Alexey Tuzikov (JINR/VBLHEP, Dubna, Moscow region), Artem Galimov, Grigoriy Trubnikov (JINR, Dubna, Moscow Region)

MOPOST003 **BBQ and Doughnut Beams: A Tasty Recipe for Measuring Amplitude Dependence of the Closest Tune Approach**
Author: Ewen Hamish Maclean, Felix Carlier, Tobias Hakan Bjorn Persson, Rogelio Tomas (CERN, Geneva)

MOPOST004 **Beam-Based Measurement of Skew-Sextupole Errors in the CERN Proton Synchrotron**
Author: Sasha Jade Horney, Alexander Huschauer, Ewen Hamish Maclean (CERN, Geneva)

MOPOST005 **The HL-LHC Project Gets Ready for Its Deployment**
Author: Markus Zerlauth, Oliver Sim Brüning, Paolo Fessia, Christelle Gaignant, Ewen Hamish Maclean, Michele Modena, Laurent Tavian (CERN, Geneva), Beniamino Di Girolamo, Hector Garcia Gavela, Thomas Otto, Giovanna Vandoni (CERN, Meyrin)

MOPOST006 **Beam Commissioning and Optimisation in the CERN Proton Synchrotron After the Upgrade of the LHC Injectors**
Author: Alexander Huschauer, Marcel Roger Coly, Denis Gerard Cotte, Heiko Damerau, Marc Delrieux, Jean-Charles Dumont, Sandy Ewen Ruairidh Easton, Oliver Hans, Gil Imesch, Sébastien Joly, Alexandre Lasheen, Cedric Lombard, Bettina Mikulec, Sara Sainz Perez, Benoit Salvant, Ronaldus Suykerbuyk, Raul Valera Teruel (CERN, Geneva), Yann Dutheil, Matthew Alexander Fraser (CERN, Geneva 23), Rodolphe Maillet, Jean-Michel Nonglaton, Frank Tecker (CERN, Meyrin)

MOPOST007 **Summary of the First Fully Operational Run of LINAC4 at CERN**
Author: Piotr Krzysztof Skowronski, Giulia Bellodi, Gian Piero Di Giovanni, Evangelia Gousiou, Jean-Baptiste Lallement, Alessandra Maria Lombardi, Bettina Mikulec, Julien Parra-Lopez, Federico Roncarolo, Jose-Luis Sanchez Alvarez, RichardScrivens, Luca Timeo (CERN, Geneva), Bartosz Przemyslaw Bielawski, Robert Borner, Rolf Wegner (CERN, Meyrin)

MOPOST008 **Simulations of Protons to Extraction at |G.gamma|=7.5 in the AGS Booster**
Author: Kiel Hock, Haixin Huang, Francois Meot (BNL, Upton, New York)

MOPOST009 **EIC Crab Cavity Multipole Analysis and Their Effects on Dynamic Aperture**
Author: Qiong Wu, Binping Xiao (BNL, Upton, New York), Yun Luo (Brookhaven National Laboratory (BNL), Upton, New York), Subashini Uddika De Silva (ODU, Norfolk, Virginia), Zenghai Li (SLAC, Menlo Park, California)

MOPOST010 **Deuteron Beam Power Ramp-Up at SPIRAL2**

Author: Angie Karina Orduz, Marco Di Giacomo, Robin Ferdinand, Jean-Michel Lagniel, Guillaume Normand (GANIL, Caen), Didier Uriot (CEA-IRFU, Gif-sur-Yvette)

MOPOST011 **CEA Contribution to the PIP-II Linear Accelerator**

Author: Nicolas Bazin, Stéphane Berry, Claire Simon (CEA-DRF-IRFU,), Robin Cubizolles, Hassen Jenhani (CEA-IRFU, Gif-sur-Yvette)

MOPOST012 **High Current Heavy Ion Beam Investigations at GSI-UNILAC**

Hartmut Vormann, Uwe Scheeler, Markus Vossberg (GSI, Darmstadt),Winfried A. Barth, Maksym Miski-Oglu, Stepan Yaramyshev (GSI, Darmstadt; HIM, Mainz)

MOPOST014 **The 325 MHz FAIR pLinac Ladder RFQ - Final Assembly for Commissioning**

Author: Maximilian Schuett, Ulrich Ratzinger (IAP, Frankfurt am Main)

MOPOST015 **Beam Dynamics Simulations for the Superconducting HELIAC CW Linac at GSI**

Author: Malte Schwarz, Thorsten Conrad (IAP, Frankfurt am Main), Manuel Heilmann, Anna Rubin (GSI, Darmstadt), Markus Basten, Christoph Burandt, Viktor Gettmann, Thorsten Kuerzeder, Maksym Miski-Oglu, Stepan Yaramyshev (HIM, Mainz; GSI, Darmstadt), Kurt Aulenbacher (HIM, Mainz; GSI, Darmstadt; IKP, Mainz), Florian Dirk Dziuba, Simon Lauber, Julian Arthur List (HIM, Mainz; IKP, Mainz; GSI, Darmstadt), Winfried A. Barth (HIM, Mainz; KPH, Mainz; GSI, Darmstadt), Holger Podlech (IAP, Frankfurt am Main; HFHF, Frankfurt am Main)

MOPOST016 **Proton Linac Design for the High Brilliance Neutron Source HBS**

Author: Malte Schwarz, Martin Droba, Klaus Kümpel, Sarah Lamprecht, Oliver Meusel, Nils Frederick Petry, Holger Podlech (IAP, Frankfurt am Main), Chuan Zhang (GSI, Darmstadt), Jingjing Li (IEK, Jülich), Johannes Baggemann, Thomas Brückel, Thomas Gutberlet, Eric Mauerhofer, Ulrich Rücker, Paul Jan Zakalek (JCNS, Jülich)

MOPOST017 **Design and Beam Dynamics Study of Disk-Loaded Structure for Muon Linac**

Author: Kazumichi Sumi, Kenji Inami, Yuki Sue, Mai Yotsuzuka (Nagoya University, Chikusa-ku, Nagoya), Yuga Nakazawa (Ibaraki University, Hitachi, Ibaraki), Masashi Otani (J-PARC, KEK & JAEA, Ibaraki-ken), Katsuhiro Moriya (JAEA/J-PARC, Tokai-Mura, Naka-Gun, Ibaraki-Ken), Yasuhiro Kondo (JAEA/J-PARC, Tokai-mura), Hiroyasu Ego, Mitsuhiro Yoshida (KEK, Ibaraki), Tsutomu Mibe, Naohito Saito (KEK, Tsukuba), Toru Iijima (KMI, Nagoya, AIchi Prefecture; Nagoya University, Chikusa-ku, Nagoya), Yusuke Takeuchi (Kyushu University, Fukuoka), Hiromasa Yasuda (University of Tokyo, Tokyo)

MOPOST018 **Early Beam Studies in the ESS RFQ and MEBT**

Author: Yngve Levinsen, Mohammad Eshraqi, Natalia Milas, Ryoichi Miyamoto, Daniel Noll (ESS, Lund)

MOPOST020 **In-Kind Contributions: The PIP-II Project at Fermilab**

Author: Luisella Lari, Lia Merminga, Allan Rowe (Fermilab, Batavia, Illinois)

MOPOST021 **ReAccelerator Upgrade, Commissioning and First Experiments at the National Superconducting Cyclotron Laboratory (NSCL) / Facility for Rare Isotope Beams (FRIB)**
Author: Antonio Carlos Camargo Villari, Georg Bollen, Kelly Douglas Davidson, Kei Fukushima, Ana Henriques, Kent Holland, Sang-Hoon Kim, Alain Lapierre, Tomofumi Maruta, Dan Morris, Samuel Nash, Peter Ostroumov, Alexander Plastun, John Priller, Bradley Sherrill, Roben Walker, Tong Zhang, Qiang Zhao (FRIB, East Lansing, Michigan), Ben Arend, Dan Benjamin Crisp, David Joseph Morrissey, Mathias Steiner (NSCL, East Lansing, Michigan)

MOPOST022 **Upgrade of the Radio Frequency Quadrupole of the ReAccelerator at the National Superconducting Cyclotron Laboratory (NSCL) / Facility for Rare Isotope Beams (FRIB)**
Author: Alexander Plastun, John Brandon, Ana Henriques, Sang-Hoon Kim, Dan Morris, Samuel Nash, Peter Ostroumov, Antonio Carlos Camargo Villari, Qiang Zhao, Shen Zhao (FRIB, East Lansing, Michigan), Dan Benjamin Crisp, David Sanderson (NSCL, East Lansing, Michigan)

MOPOST024 **A Local Modification of the HL-LHC Optics for an Improved Performance of the Alice Fixed-Target Layout Based on Bent Crystal Beam Halo Splitting.**
Author: Marcin Patecki, Daniel Kikola (Warsaw University of Technology, Warsaw), Alex Fomin, Pascal Dominik Hermes, Daniele Mirarchi, Stefano Redaelli (CERN, Geneva)

MOPOST025 **Influences of the Transverse Motions of the Particles to the Recombination Rate of a Co-Propagating**
Author: Gang Wang, Dmitry Kayran, Igor Pinayev, Peter Thieberger (BNL, Upton, New York), Vladimir N. Litvinenko (Stony Brook University, Stony Brook; BNL, Upton, New York)

MOPOST026 **Influences of the Energy Jitter to the Performance of the Coherent Electron Cooling**
Author: Gang Wang, Jun Ma (BNL, Upton, New York), Vladimir N. Litvinenko (BNL, Upton, New York; Stony Brook University, Stony Brook)

MOPOST027 **The Zgoubidoo Python Framework for Ray-Tracing Simulations With Zgoubi: Applications to Fixed-Field Accelerators**
Author: Marion Vanwelde, Eustache Gnacadja, Nicolas Pauly, Eliott Ramoisiaux, Robin Tesse (ULB, Bruxelles), Cédric Hernalsteens (CERN, Meyrin; ULB, Bruxelles)

MOPOST028 **Tune Control in Fixed Field Accelerators**
Author: Adam F. Steinberg, Robert Appleby (UMAN, Manchester), Suzanne L. Sheehy (The University of Melbourne, Melbourne, Victoria)

MOPOST029 **Fast Cycling FFA Permanent Magnet Synchrotron**
Author: Dejan Trbojevic, J. Scott Berg, Michael Blaskiewicz, Stephen Brooks (BNL, Upton, New York)

MOPOST030 **Proton Irradiation Site for Si-Detectors at the Bonn Isochronous Cyclotron**
Author: Dennis Sauerland, Reinhard Beck, Paul-Dieter Eversheim (HISKP, Bonn), Jochen Dingfelder, Pascal Wolf (SiLab, Bonn)

MOPOST032 **A New Approach for a Cyclotron Design.**
Author: Oleg Karamyshev (JINR, Dubna, Moscow Region)

MOPOST033 **Betatron Tune Characterization of the Rutgers 12-Inch Cyclotron for Different Magnetic Poles Configuration**
Author: Cédric Hernalsteens (CERN, Meyrin), Michelle Miller (Brown University, Providence), Timothy Ponter (IBA, Louvain-la-Neuve), Kiersten J Ruisard (ORNL, Oak Ridge, Tennessee), Brian Louis Beaudoin, Timothy Koeth (UMD, College Park, Maryland)

MOPOST035 **Operational Experience and Performance of the REX/HIE-ISOLDE Post-Accelerator**
Author: Jose Alberto Rodriguez, Niels Bidault, Eleftherios Fadakis, Emiliano Piselli, Erwin Siesling (CERN, Meyrin), Miguel Lozano, Simon Mataguez (CERN, Geneva)

MOPOST036 **Transverse Emittance Measurements of the Extracted Beams Produced by the ISOLDE Target Ion Sources at CERN**
Author: Niels Bidault (CERN, Meyrin)

MOPOST037 **Characterisation of Bunch-by-Bunch Tune Shift Effects in the SPS**
Author: Ingrid Mases, Hannes Bartosik, Verena Kain, Konstantinos Paraschou, Carlo Zannini (CERN, Geneva), Michael Schenk (CERN, Meyrin)

MOPOST038 **EXCITATION OF THE Sigma_l_l = 90° RESONANCE BY THE CAVITY RF ACCELERATING FIELDS**
Author: Jean-Michel Lagniel (GANIL, Caen)

MOPOST039 **Algorithm to Mitigate Magnetic Hysteresis in Magnets With Unipolar Power Supplies**
Author: Jamiel Nasser, Richard Baartman, Oliver Karl Kester, Spencer Kiy, Thomas Planche, Stephanie Diana Rädel, Olivier Shelbaya (TRIUMF, Vancouver)

MOPOST040 **On a Framework to Analyze Single-Particle Non-Linear Beam Dynamics: Normal Form on a Critical Point**
Author: Malte Titze (HZB, Berlin)

MOPOST041 **Dynamic Aperture Studies for the Transfer Line From FLUTE to cSTART**
Author: Jens Schaefer, Bastian Haerer, Anke-Susanne Mueller, Alexander Ivanovich Papash, Robert Ruprecht, Marcel Schuh (KIT, Karlsruhe)

MOPOST042 **Using Dynamic Indicators for Probing Single-Particle Stability in Circular Accelerators**
Author: Carlo Emilio Montanari (Bologna University, Bologna; CERN, Geneva), Armando Bazzani, Giorgio Turchetti (Bologna University, Bologna), Massimo Giovannozzi (CERN, Geneva)

MOPOST043 **Testing the Global Diffusive Behaviour of Beam-Halo Dynamics at the CERN LHC Using Collimator Scans**
Author: Carlo Emilio Montanari (Bologna University, Bologna; CERN, Geneva), Armando Bazzani (Bologna University, Bologna), Massimo Giovannozzi, Stefano Redaelli (CERN, Geneva), Arkadiusz Andrzej Gorzawski (University of Malta, Msida)

MOPOST044 **Dark Current in the LCLS-II-HE Superconducting Injector**
Author: Sean Thomas Littleton (Stanford University, Stanford, California), Chris Adolphsen, Christopher Mayes, Tor Raubenheimer (SLAC, Menlo Park, California)

MOPOST045 **A Novel Tool for Beam Dynamics Studies With Hollow Electron Lenses**
Author: Pascal Dominik Hermes, Roderik Bruce, Massimo Giovannozzi, Giovanni Iadarola, Daniele Mirarchi, Stefano Redaelli (CERN, Geneva), Riccardo De Maria (CERN, Meyrin)

MOPOST046 **Enforcing the Convergence of Bunch Density Distribution Self-Consistent Calculation in the Presence of a Harmonic Cavity Through Anderson Acceleration Method**
Author: Iago Carvalho de Almeida (CNPEM, Campinas, SP), Mark Hoffmann Wallner, André Pontes Barbosa Lima (LNLS, Campinas)

MOPOST047 **Determination of the Phase-Space Stability Border With Machine Learning Techniques**
Author: Frederik Florentinus Van der Veken, Runa Akbari, Michiel Paul Bogaert, Massimo Giovannozzi, Amy Lisa Lowyck, Carlo Emilio Montanari, Wietse Van Goethem (CERN, Geneva), Elena Fol (CERN, Meyrin)

MOPOST048 **Efficient Representation of Realistic 3D Static Magnetic Fields for Symplectic Tracking and First Applications for Frequency Analysis and Dynamic Aperture Studies in ELENA**
Author: Lajos Bojtar (CERN, Meyrin)

MOPOST049 **Electron Cloud Build-Up for the Arc Sextupole Sections of the FCC-ee**
Author: Jaime Eduardo Rocha Muñoz, Georfrey Humberto Israel Maury Cuna (Universidad de Guanajuato, León), Frank Zimmermann (CERN, Meyrin), Karla Beatriz Cantún Avila (UADY, Mérida, Yucatán)

MOPOST050 **Third-order Resonance Compensation at the FNAL Recycler Ring**
Author: Cristhian Eduardo Gonzalez-Ortiz (MSU, East Lansing, Michigan), Peter Ostroumov (FRIB, East Lansing, Michigan), Robert Ainsworth (Fermilab, Batavia, Illinois)

MOPOST051 **Study of Transverse Resonant Island Buckets at CESR**
Author: Suntao Wang, Vardan Khachatryan (Cornell University (CLASSE), Ithaca, New York)

MOPOST053 **Transverse Resonance Islands Buckets on SPEAR3**
Author: Jaehyun Kim, James A. Safranek, Kai Tian (SLAC, Menlo Park, California)

MOPOST054 **A Hybrid Multi-Bend Achromat Lattice Design for SSRL-X**
Author: Jaehyun Kim, Xiaobiao Huang, Pantaleo Raimondi, James A. Safranek, Minghao Song, Kai Tian (SLAC, Menlo Park, California)

MOPOST055 **The EIC Rapid Cycling Synchrotron Dynamic Aperture Optimization**
Author: Henry Lovelace III, Christoph Montag, Vahid Houston Ranjbar (BNL, Upton, New York), Fanglei Lin (ORNL RAD, Oak Ridge, Tennessee)

MOPOST056 **Interplay between Space Charge and Intra-beam Scattering for the CERN Ion Injectors**
Author: Michail Zampetakis, Foteini Asvesta, Hannes Bartosik, Yannis Papaphilippou (CERN, Geneva), Fanouria Antoniou (CERN, Meyrin)

MOPOST057 **Characterization of the Vertical Beam Tails in the CERN PS Booster**

Author: Tirsi Prebibaj, Fanouria Antoniou, Chiara Bracco, Elisabeth Renner (CERN, Meyrin), Foteini Asvesta, Hannes Bartosik, Gian Piero Di Giovanni (CERN, Geneva)

MOPOST058 **Studies on the Vertical Half-Integer Resonance in the CERN PS Booster**

Author: Tirsi Prebibaj, Fanouria Antoniou (CERN, Meyrin), Foteini Asvesta, Hannes Bartosik (CERN, Geneva), Giuliano Franchetti (GSI, Darmstadt)

Jun 13, 2022 14:00 - 16:00 Poster Session Poster Area Padthai

MOPOPT - Poster Session - Padthai

MOPOPT002 **Improvements on Sirius Beam Stability**

Author: Sergio Rodrigo Marques, Murilo Barbosa Alves, Fabio Arroyo, Matheus Pionorio Calcanha, Henrique Ferreira Canova, Fernando Henrique de Sá, Bruno Edson Limeira, Lin Liu, Regis Terenzi Neuenschwander, Andrei Guinancio de Carvalho Pereira, Daniel de Oliveira Tavares (LNLS, Campinas), Gabriel Oehlmeyer Brunheira, Ariane Cristina Taffarello Cardoso, Rafael Batista Cardoso, Rodrigo Junqueira Leao, Leonardo Rossi Leao, Pedro Henrique Sousa Martins, Rodrigo Oliveira Neto, Matheus Gasques Siqueira (CNPEM, Campinas, SP)

MOPOPT003 **Studying Instabilities in the Canadian Light Source Storage Ring Using the Transverse Feedback System**

Author: Stephen Martens (University of Saskatchewan, Saskatoon), Drew Bertwistle, Mark James Boland (CLS, Saskatoon, Saskatchewan), Peter Hartmann (DELTA, Dortmund)

MOPOPT004 **Development of a New Clusterization Method for the GEM-TPC With Uranium Projectiles**

Author: Minna Luoma, Juha Äystö, Francisco Garcia, Ari Jokinen, Raimo Turpeinen (HIP, University of Helsinki), Tobias Blatz, Holger Flemming, Klaus Götzen, Christos Karagiannis, Nikolaus Kurz, Sven Loechner, Chiara Nociforo, Christian Joachim Schmidt, Haik Simon, Bernd Voss, Peter Wieczorek, Martin Winkler (GSI, Darmstadt), Davit Chokheli (Georgian Technical University, Tbilisi), Tuomas Grahn, Sami Rinta-Antila (JYFL, Jyvaskyla)

MOPOPT005 **Bunch Measurements With BPM at Low Energy Hadron Accelerators**

SIDI Mohammed Ben Abdillah (Université Paris-Saclay, CNRS/IN2P3, IJCLab, Orsay), Franck Pompon (SCK CEN, Brussels), Sofiane Boussa, Angélique Gatera (SCK CEN, Mol)

MOPOPT006 **Characterization of the Electron Beam Visualization Stations of the ThomX Accelerator**

Author: Alexandre Moutardier, Christelle Bruni, Jean-Noël Cayla, Iryna Chaikovska, Sophie Chancé, Nicolas Delerue, Hayg Guler, Hugues Monard, Maher Omeich (Université Paris-Saclay, CNRS/IN2P3, IJCLab, Orsay), Scott David Williams (The University of Melbourne, Melbourne, Victoria; Université Paris-Saclay, CNRS/IN2P3, IJCLab, Orsay)

MOPOPT007 **Single-Shot Time-Stretch Electro-Optic Sampling at the ELBE Coherent THz CDR Source**

Author: Christelle Hanoun, Serge Bielawski, Clement Evain, Eléonore Roussel, Christophe Szwaj (PhLAM/CERLA, Villeneuve d'Ascq), Pavel Evtushenko, Sergey Kovalev, Michael Kuntzsch, Anton Ryzhov, Christof Schneider (HZDR, Dresden)

MOPOPT008 **Measuring the Shape of Electron Bunches Using Diversity Electro-Optic Sampling at European XFEL**
Author: Serge Bielawski, Clement Evain, Christelle Hanoun, Eléonore Roussel, Christophe Szwaj (PhLAM/CERLA, Villeneuve d'Ascq), Christopher Gerth, Bernd Steffen (DESY, Hamburg)

MOPOPT009 **New Bunch by Bunch Filling-Pattern Measuring System at ELSA**
Author: Alexandra Katharina Wald, Klaus Desch, Daniel Elsner, Dennis Proft (ELSA, Bonn)

MOPOPT010 **Status of Diamond and LGAD Based Beam-Detectors for the mCBM and CBM Experiments at GSI and FAIR**
Author: Adrian Rost, Pierre-Alain Loizeau (FAIR, Darmstadt), Jochen Fruehauf, Mladen Kis, Jerzy Pietraszko, Michael Traeger, Felix Ulrich-Pur (GSI, Darmstadt), Tetyana Galatyuk (GSI, Darmstadt; TU Darmstadt, Darmstadt), Vadym Kedych, Wilhelm Krueger (TU Darmstadt, Darmstadt), Ingo Deppner, Norbert Herrmann, Esteban Rubio (Universitaet Heidelberg, Heidelberg)

MOPOPT011 **Transverse Excitation and Applications for Beam Control**
Author: Philipp Niedermayer, Rahul Singh (GSI, Darmstadt)

MOPOPT012 **Concept of a Beam Diagnostics System for the Multi-Turn ERL Operation at the S-DALINAC**
Author: Philipp Niedermayer, Rahul Singh (GSI, Darmstadt)

MOPOPT013 **Comparative Study of Broadband Room Temperature THz Detectors for High and Intermediate Frequency Response**
Author: Rahul Yadav, Sascha Preu (IMP, TU Darmstadt, Darmstadt), Andreas Penirschke (THM, Friedberg)

MOPOPT014 **Beam Dynamics Studies by Long-Term Observation of Coherently Emitted THz Pulses at DELTA**
Author: Carsten Mai, Benedikt Büsing, Arne Held, Shaukat Khan (DELTA, Dortmund)

MOPOPT015 **Electro-Optical Bunch Diagnostics Using an Optimized Laser Spectrometer**
Author: Carsten Mai, Marcel Kebekus, Shaukat Khan, Vivek Vijayan (DELTA, Dortmund), Edmund Blomley, Erik Bründermann, Michele Caselle, Stefan Funkner, Anke-Susanne Mueller, Gudrun Niehues, Micha Reissig, Johannes Leonhard Steinmann, Christina Widmann (KIT, Karlsruhe)

MOPOPT016 **Update of the Bunch Arrival Time Monitor at ELBE**
Author: Michael Kuntzsch, Andrei Maalberg, Andreas Schwarz, Klaus Zenker (HZDR, Dresden), Marie Kristin Czwalinna, Jiri Kral (DESY, Hamburg)

MOPOPT017 **Realizing Ts/s Sampling Rates With Photonic Time-Stretch for Electron Beam Diagnostics**
Author: Olena Manzhura, Erik Bründermann, Michele Caselle,Suren A. Chilingaryan, Stefan Funkner, Andreas Kopmann, Anke-Susanne Mueller, Michael Johannes Nasse, Gudrun Niehues, Meghana Mahaveer Patil, Johannes Leonhard Steinmann (KIT, Karlsruhe), Timo Dritschler (KIT, Eggenstein-Leopoldshafen), Serge Bielawski, Eléonore Roussel, Christophe Szwaj (PhLAM/CERLA, Villeneuve d'Ascq; PhLAM/CERCLA, Villeneuve d'Ascq Cedex)

MOPOPT018 **Advancing to a GHz Transition Radiation Monitor for Longitudinal Charge Distribution Measurements**
Author: Stephan Klaproth, Andreas Penirschke (THM, Friedberg), Thomas Reichert, Rahul Singh (GSI, Darmstadt), Herbert De Gersem (TEMF, TU Darmstadt, Darmstadt)

MOPOPT019 **Wakefield Studies for a Bunch Arrival-Time Monitor Concept With Rod-Shaped Pickups on a Printed Circuit Board for X-Ray Free-Electron Lasers**
Author: Bernhard Erich Jürgen Scheible, Andreas Penirschke (THM, Friedberg), Marie Kristin Czwalinna, Holger Schlarb (DESY, Hamburg), Wolfgang Ackermann, Herbert De Gersem (TEMF, TU Darmstadt, Darmstadt)

MOPOPT020 **Longitudinal Phase Space Diagnostics With Corrugated Structure at the European XFEL**
Author: Sergey Tomin, Winfried Decking, Nina Golubeva, Artem Igorevich Novokshonov, Torsten Wohlenberg, Igor Zagorodnov (DESY, Hamburg)

MOPOPT021 **5D Tomography of Electron Bunches at ARES**
Author: Sonja Jaster-Merz (DESY, Hamburg; University of Hamburg, Hamburg), Reinhard Brinkmann, Florian Burkart, Thomas Vinatier (DESY, Hamburg), Ralph Wolfgang Assmann (DESY, Hamburg; LNF-INFN, Frascati)

MOPOPT022 **Beam Dynamics of the Transparent Injection for the Max Iv 1.5 GeV Ring**
Author: Marco Apollonio, Åke Andersson, Miriam Brosi, David Kristian Olsson, Pedro Fernandes Tavares, Alexey Vorozhtsov (MAX IV Laboratory, Lund)

MOPOPT023 **Improved Emittance and Brightness for the Max IV 3 GeV Ring**
Author: Marco Apollonio, Åke Andersson, Miriam Brosi, Robert Lindvall, David Kristian Olsson, Magnus Sjöström, Robin Svärd, Pedro Fernandes Tavares (MAX IV Laboratory, Lund)

MOPOPT024 **Measuring the Coherent Synchrotron Radiation Far Field With Electro-Optical Techniques**
Author: Christina Widmann, Erik Bruendermann, Stefan Funkner, Anke-Susanne Mueller, Michael Johannes Nasse, Gudrun Niehues, Meghana Mahaveer Patil,Micha Reissig, Johannes Leonhard Steinmann (KIT, Karlsruhe), Marvin Dennis Noll (KIT, Eggenstein-Leopoldshafen), Miriam Brosi (KIT, Karlsruhe; MAX IV Laboratory, Lund)

MOPOPT025 **Development of an Electro-Optical Longitudinal Bunch Profile Monitor at KARA Towards a Beam Diagnostics Tool for FCC-ee**
Author: Micha Reissig, Miriam Brosi, Christina Widmann (KIT, Karlsruhe), Erik Bruendermann, Stefan Funkner, Bastian Haerer, Anke-Susanne Mueller, Gudrun Niehues, Meghana Mahaveer Patil, Robert Ruprecht (KIT, Eggenstein-Leopoldshafen)

MOPOPT026 **Beam Diagnostics for the Storage Ring of the cSTART Project at KIT**
Author: Dima El Khechen, Akira Mochihashi, Alexander Ivanovich Papash, Patrick Schreiber (KIT, Karlsruhe), Erik Bruendermann, Anke-Susanne Mueller, Marvin Dennis Noll, Robert Ruprecht, Marcel Schuh, Johannes Leonhard Steinmann (KIT, Eggenstein-Leopoldshafen)

MOPOPT027 **Transverse and longitudinal profile measurements at the KARA booster synchrotron**
Author: Dima El Khechen, Akira Mochihashi, Patrick Schreiber, Christina Widmann (KIT, Karlsruhe), Edmund Blomley, Erik Bruendermann, Erhard Huttel, Anke-Susanne Mueller, Marvin Dennis Noll, Robert Ruprecht, Marcel Schuh, Johannes Leonhard Steinmann (KIT, Eggenstein-Leopoldshafen)

MOPOPT028 **Beam Diagnostics and Instrumentation for MESA**

Author: Dima El Khechen, Akira Mochihashi, Patrick Schreiber, Christina Widmann (KIT, Karlsruhe), Edmund Blomley, Erik Bruendermann, Erhard Huttel, Anke-Susanne Mueller, Marvin Dennis Noll, Robert Ruprecht, Marcel Schuh, Johannes Leonhard Steinmann (KIT, Eggenstein-Leopoldshafen)

MOPOPT029 **Longitudinal Phase Space Benchmarking for PITZ Bunch Compressor**

Author: Anusorn Lueangaramwong, Zakaria Aboulbanine, Gowri Dulanjalee Adhikari, Namra Aftab, Prach Boonpornprasert, Georgi Zhivkov Georgiev, James David Good, Matthias Gross, Christian Koschitzki, Mikhail Krasilnikov, Xiangkun Li, Osip Lishilin, David Melkumyan, Houjun Qian, Guan Shu, Frank Stephan, Grygorii Vashchenko, Tobias Weilbach (DESY Zeuthen, Zeuthen), Natthawut Chaisueb (Chiang Mai University, Chiang Mai)

MOPOPT030 **ATF2 C-Band Cavity BPM System Long-Term Operation Status Report**

Author: Alexander Aryshev, Nobuhiro Terunuma (KEK, Ibaraki), Konstantin Kruchinin (ELI-BEAMS, Prague), Stewart Boogert, Alexey Lyapin, Mark Simon McCallum, William Shields (JAI, Egham, Surrey), Konstantin Popov (Sokendai, Ibaraki)

MOPOPT031 **Renovation of the SR Beam Profile Monitors With Novel Polycrystal Diamond Mirrors at the SuperKEKB Accelerator**

Author: Gaku Mitsuka, Hitomi Ikeda, Toshiyuki Mitsuhashi (KEK, Ibaraki)

MOPOPT032 **Improvements of Impedance Matching Circuit of Injection Kicker Magnet for J-PARC Main Ring**

Author: Takuya Sugimoto, Koji Ishii, Soma Iwata, Hiroshi Matsumoto, Tatsunobu Shibata (KEK, Ibaraki)

MOPOPT033 **Study of Cherenkov Diffraction Radiation for Beam Diagnostics**

Author: Hiroyuki Hama, Ken-ichi Nanbu (Tohoku University, Sendai)

MOPOPT034 **Surrogate-Based Bayesian Inference of Transverse Beam Distribution for Non-Stationary Accelerator Systems**

Author: Hiroki Fujii, Nobuhisa Fukunishi (RIKEN Nishina Center, Wako), Masaki Yamakita (Tokyo Tech, Tokyo)

MOPOPT036 **Analysis of Synchronous Oscillation Damping of Storage Ring Based on Wavelet Analysis Method**

Author: Xing Yang (SINAP, Shanghai), Xingyi Xu (SINAP, Shanghai; University of Chinese Academy of Sciences, Beijing), Yongbin Leng (SSRF, Shanghai)

MOPOPT037 **Beam Measurement and Application of the Metal Vapor Vacuum Arc Ion Source at KOMAC**

Author: Seung Ho Lee, Han-Sung Kim, Hyeok-Jung Kwon (KOMAC, KAERI, Gyeongju)

MOPOPT038 **Development of Button BPM Electronics for the Bunch by Bunch Feedback System of 4GSR**

Author: Si-Won Jang (KUS, Sejong)

MOPOPT039 **Button BPM Development for 4GSR**
Author: Si-Won Jang (KUS, Sejong)

MOPOPT040 **Summary of the Post-Long Shutdown 2 LHC Hardware Commissioning Campaign**
Author: Andrea Apollonio, Mateusz Jakub Bednarek, Mirko Pojer, Samer Yammine (CERN, Meyrin), Odd Oyvind Andreassen, Alain Antoine, Theodoros Argyropoulos, Miguel Cerqueira Bastos, Bernardo Bordini, Krzysztof Brodzinski, Andrea Calia, Zinour Charifoulline, Gert-Jan Coelingh, Giorgio D'Angelo, Dimitri Delikaris, Reiner Denz, Lucio Fiscarelli, Vincent Froidbise, Marc-Antoine Galilée, Jean-Christophe Garnier, Roman Gorbonosov, Per Hagen, Michael Hostettler, Delphine Jacquet, Sandrine Le Naour, Daniele Mirarchi, Valerie Montabonnet, Bozhidar Ivanov Panev, Tobias Hakan Bjorn Persson, Tomasz Podzorny, Emmanuele Ravaioli,Felix Rodriguez-Mateos, Andrzej Piotr Siemko, Matteo Solfaroli, Jelena Spasic, Anita Stanisz, Jens Steckert, Rende Steerenberg, Slawomir Sudak, Hugues Thiesen, Ezio Todesco, Georges Trad, Jan Uythoven, Slawosz Uznanski, Arjan Verweij, Jorg Wenninger, Gerard Willering, Daniel Wollmann (CERN, Geneva), Vito Vizziello (INFN/LASA, Segrate (MI))

MOPOPT041 **Artificial Intelligence-Assisted Beam Distribution Imaging Using a Single Multimode Fiber at CERN**
Author: Georges Trad (CERN, Geneva), Stephane Burger (CERN, Geneva 23)

MOPOPT042 **Recent AWAKE Diagnostics Development and Operational Results**
Author: Eugenio Senes, Michal Krupa (CERN, Geneva), Stephane Burger, Stefano Mazzoni, Eirini Poimenidou, Athanasios Topaloudis, Manfred Wendt (CERN, Geneva 23), Thibaut Lefevre, Giovanni Zevi Della Porta (CERN, Meyrin), Joseph Wolfenden (Cockcroft Institute, Warrington, Cheshire; The University of Liverpool, Liverpool), Philip Burrows, Collette Pakuza (JAI, Oxford; Oxford University, Oxford, Oxon), David Andrew Cooke (UCL, London)

MOPOPT043 **Recent Developments in Longitudinal Phase Space Tomography**
Author: Simon Christopher Paul Albright, Alexandre Lasheen (CERN, Geneva 23), Anton Hao-Chen Lu (KTH/NADA, Stockholm), Christoffer Hjertø Grindheim (NTNU, Trondheim)

MOPOPT045 **Study of Beam Loss Localization With a Cherenkov Beam Loss Monitor in the CLEAR Facility at CERN**
Author: Sara Benitez Berrocal (CERN, Geneva 23), Pierre Korysko (CERN, Geneva), Ewald Effinger, Jose Carlos Esteban Felipe, Wilfrid Farabolini, Anders Toft Lernevall, Belen Salvachua (CERN, Meyrin), Minsi Chen (University of Huddersfield, Huddersfield)

MOPOPT046 **Linearity and Response Time of the LHC Diamond Beam Loss Monitors in the CLEAR Beam Test Facility at CERN**
Author: Sara Morales Vigo (CERN, Geneva 23; Cockcroft Institute, Warrington, Cheshire), Luke Aidan Dyks, Wilfrid Farabolini, Pierre Korysko (CERN, Geneva), Eva Calvo Giraldo, Ewald Effinger, Anders Toft Lernevall, Belen Salvachua, Christos Zamantzas (CERN, Meyrin), Carsten Peter Welsch, Joseph Wolfenden (Cockcroft Institute, Warrington, Cheshire)

MOPOPT047 **Experimental Demonstration of Machine Learning Application in LHC Optics Commissioning**
Author: Elena Fol (CERN, Meyrin), Felix Carlier, Joschua Dilly, Michael Hofer, Jacqueline Keintzel, Mael Le Garrec, Ewen Hamish Maclean, Tobias Hakan Bjorn Persson, Felix Soubelet, Rogelio Tomas, Andreas Wegscheider (CERN, Geneva), Javier Fernando Cardona (UNAL, Bogota D.C)

MOPOPT048 **Design of a Prototype Gas Jet Profile Monitor for Installation Into the Large Hadron Collider at CERN**
Author: Raymond Veness, Cristina Castro Sequeiro, Thibaut Lefevre, Adriana Rossi, Gerhard Schneider, Krystian Sidorowski (CERN, Meyrin), Marton Ady, Stefano Mazzoni, Ioannis Papazoglou (CERN, Geneva), Ondrej Sedlacek (CERN, Geneva; Cockcroft Institute, Warrington, Cheshire; The University of Liverpool, Liverpool), Narender Kumar, Amir Salehilashkajani, Carsten Peter Welsch, Hao Dai Zhang (Cockcroft Institute, Warrington, Cheshire; The University of Liverpool, Liverpool), Peter Forck, Serban Udrea (GSI, Darmstadt), Oliver Stringer (The University of Liverpool, Liverpool)

MOPOPT049 **Energy Spectrum and Emittance Measurements of Electron Beam for Producing MIR-FEL at PBP-CMU Electron Linac Laboratory**
Author: Pitchayapak Kitisri, Kittipong Techakaew (Chiang Mai University, Chiang Mai), Sakhorn Rimjaem (Chiang Mai University, Chiang Mai; ThEP Center, Bangkok)

MOPOPT050 **Systematic Study of Measuring Systems for Electron Beam Energy, Energy Spread and Emittance of the Accelerator System at the PBP-CMU Electron Linac Laboratory**
Author: Kittipong Techakaew, Sakhorn Rimjaem (Chiang Mai University, Chiang Mai)

MOPOPT051 **Optical Fiber Based Beam Loss Monitor for SPS Machine**
Author: Thapakron Pulampong, Wiwek Phacheerak, Porntip Sudmuang, Natthawut Suradet (SLRI, Nakhon Ratchasima)

MOPOPT052 **Beam-Based Alignment for LCLS-II CuS Linac-to-Undulator Quadrupoles**
Author: Xiaobiao Huang, Dorian Keith Bohler (SLAC, Menlo Park, California)

MOPOPT053 **A Beam Position Monitor for Electron Bunch Detection in the Presence of a More Intense Proton Bunch for the AWAKE Experiment**
Author: Collette Pakuza, Philip Burrows (JAI, Oxford; Oxford University, Oxford, Oxon), Roberto Corsini, Wilfrid Farabolini, Pierre Korysko, Michal Krupa, Thibaut Lefevre, Stefano Mazzoni, Eugenio Senes, Manfred Wendt (CERN, Geneva)

MOPOPT054 **A Modified Nomarski Interferometer to Study Supersonic Gas Jet Density Profiles**
Author: Catherine Swain, Oznur Apsimon, Amir Salehilashkajani, Carsten Peter Welsch, Joseph Wolfenden, Hao Dai Zhang (Cockcroft Institute, Warrington, Cheshire; The University of Liverpool, Liverpool)

MOPOPT055 **A Gas Jet Beam Profile Monitor for Beam Halo Measurement**
Author: Oliver Stringer (The University of Liverpool, Liverpool), Narender Kumar, Carsten Peter Welsch, Hao Dai Zhang (Cockcroft Institute, Warrington, Cheshire; The University of Liverpool, Liverpool)

MOPOPT056 **Commissioning of a Gas Jet Beam Profile Monitor for EBTS and LHC**
Author: Hao Dai Zhang, Narender Kumar, Amir Salehilashkajani, Carsten Peter Welsch (Cockcroft Institute, Warrington, Cheshire; The University of Liverpool, Liverpool), Marton Ady, Thibaut Lefevre, Stefano Mazzoni, Ioannis Papazoglou, Gerhard Schneider, Raymond Veness (CERN, Geneva), Ondrej Sedlacek (CERN, Geneva; Cockcroft Institute, Warrington, Cheshire; The University of Liverpool, Liverpool), Adriana Rossi, Krystian Sidorowski (CERN, Meyrin), Peter Forck, Serban Udrea (GSI, Darmstadt), Oliver Stringer (The University of Liverpool, Liverpool)

MOPOPT057 **Data Analysis and Control of a MeV Ultrafast Electron Diffraction System Using Machine Learning**
Author: Mariana Andrea Fazio, Manel Martinez-Ramon, Salvador Isaac Sosa Guitron (UNM-ECE, Albuquerque), David Martin, Michael Papka (ANL, Lemont, Illinois), Marcus Babzien, Mikhail Fedurin, Junjie Li, Mark Alan Palmer (BNL, Upton, New York), Alan Hurd, Christine Sweeney (LANL, Los Alamos, New Mexico), Sandra Biedron (UNM-ECE, Albuquerque; UNM-ME, Albuquerque, New Mexico)

MOPOPT058 **Machine Learning-Based Control for HoM Reduction and Emittance Preservation in a TESLA-Type Cryomodule at FAST**
Author: Jorge Alberto Diaz Cruz (SLAC, Menlo Park, California; UNM-ECE, Albuquerque), Dean Richard Edstrom, Alex Lumpkin, Randy Michael Thurman-Keup (Fermilab, Batavia, Illinois), Auralee Edelen, Bryce Jacobson, John Sikora (SLAC, Menlo Park, California)

MOPOPT061 **Using Off Axis Undulator Radiation as a Longitudainal Electron Beam Diagnostic**
Author: Quinn Robert Marksteiner, Heather L. Andrews, Joshua Eugene Coleman, William Romero, Nikolai Yampolsky, Muhammed Rashedul Alam Zuboraj (LANL, Los Alamos, New Mexico), Robert Ryne (LBNL, Berkeley), Samuel Krebsbach Barber, Jeroen van Tilborg (LBNL, Berkeley, California), Claudio Emma (UCLA, Los Angeles), Bricker Ostler (University of Chicago, Chicago, Illinois)

MOPOPT062 **Foil Focusing Effect in Pepper-Pot Measurements in Intense Electron Beams**
Author: Sebastian Szustkowski, Michael Andrew Jaworski, David Moir (LANL, Los Alamos, New Mexico)

Thin conducting foils, such as pepper-pot masks, perpendicular to an oncoming intense electron beam acts like an imperfect axisymmetric lens. The beamlets distribution from a pepper-pot mask varies based on if the mask hole radius is smaller or larger than the beams Debye length. Correcting for focusing effect is necessary for measuring transverse emittance with pepper-pot technique for intense electron beams. The Dual Axis Radiographic Hydrodynamic Test Facility (DARHT) Axis-I produces a 20 MeV, 2 kA, 80 ns FWHM electron beam for flash radiography. In this paper, we explore the effect of foil focusing due to various pepper-pot masks at DARHT Axis-I injector region from a 55 mm velvet cathode.
Sebastian Szustkowski - Los Alamos National Laboratory

MOPOPT063 **Reconstruction of Beam Parameters From Betatron Radiation Using Maximum Likelihood Estimation and Machine Learning**
Author: Sarah Zhang, Gerard Andonian, Pratik Manwani, Brian Naranjo, Maanas Hemanth Oruganti, James Rosenzweig (UCLA, Los Angeles, California), Oznur Apsimon, Carsten Peter Welsch (The University of Liverpool, Liverpool), Monika Yadav (The University of Liverpool, Liverpool; UCLA, Los Angeles, California), Claire Evangeline Hansel (UCLA, Los Angeles)

MOPOPT065 **Pair Spectrometer for FACET-II: Hardware Update**
Author: Brian Naranjo, Gerard Andonian, Atsushi Fukasawa, Nathan Majernik, Maanas Hemanth Oruganti, James Rosenzweig, Yusuke Sakai, Oliver Williams, Monika Yadav (UCLA, Los Angeles, California), Elias Gerstmayr, Carsten Hast, R. Keith Jobe, Douglas W Storey (SLAC, Menlo Park, California)

MOPOPT066 **Gas Sheet Diagnostics Using PIC Code**

Author: Monika Yadav, Pratik Manwani, James Rosenzweig (UCLA, Los Angeles, California), Gerard Andonian (RadiaBeam, Santa Monica, California), Nathan M. Cook, Abdourahmane Diaw, Christopher Hall (RadiaSoft LLC, Boulder, Colorado), Oznur Apsimon, Carsten Peter Welsch (The University of Liverpool, Liverpool), Nora Peak Norvell (UCSC, Santa Cruz, California)

MOPOPT067 **Electron Beam Phase Space Reconstruction From a Gas Sheet Diagnostic**

Author: Nathan M. Cook, Abdourahmane Diaw, Christopher Hall (RadiaSoft LLC, Boulder, Colorado), Gerard Andonian (RadiaBeam, Santa Monica, California), Monika Yadav (The University of Liverpool, Liverpool), Nora Peak Norvell (UCSC, Santa Cruz, California)

MOPOPT069 **A Data-Driven Beam Trajectory Monitoring at the European XFEL**

Author: Antonin Sulc, Raimund Kammering, Tim Wilksen (DESY, Hamburg)

Jun 13, 2022 14:00 - 16:00 Poster Session Poster Area Tomyam Kung

MOPOTK - Poster Session - Tomyam Kung

MOPOTK001 **The Influence of Solenoid Field on Off-Axis Travelling Beam in AREAL Accelerator**

Author: Hakob Davtyan (CANDLE, Yerevan), Gayane A. Amatuni, Aida Asoyan, Milena Yazichyan (CANDLE SRI, Yerevan), Armen Grigoryan (CANDLE SRI, Yerevan; YSU, Yerevan)

MOPOTK002 **Fast Orbit Response Matrix Measurement via Sine-Wave Excitation of Correctors at Sirius**

Author: Matheus Melo Santos Velloso, Murilo Barbosa Alves, Fernando Henrique de Sá (LNLS, Campinas)

MOPOTK003 **Absorbed Dose Characteristics for Irradiation Experiments at AREAL 5 MeV Electron Linac**

Author: Vitali Khachatryan, Zohrab Amirkhanyan, Hakob Davtyan, Bagrat Grigoryan, Michael Ivanyan, Vahan Petrosyan, Ashot Vardanyan, Arsham Yeremyan (CANDLE SRI, Yerevan), Armen Grigoryan (CANDLE SRI, Yerevan; YSU, Yerevan)

MOPOTK004 **Status of the SOLEIL Lattice Upgrade Robustness Studies**

Author: Oscar Roberto Blanco-García (INFN/LNF, Frascati), marin alan deniaud (JAI, Egham, Surrey), David Amorim, Alexandre Loulergue, Laurent Stanislas Nadolski, Ryutaro Nagaoka (SOLEIL, Gif-sur-Yvette)

MOPOTK005 **Progress on the Injector System and Injection Performance for the Synchrotron SOLEIL Upgrade**

Author: Marie-Agnès Tordeux, Patrick Alexandre, Nicolas Béchu, Rachid Ben El Fekih, Francois Bouvet, Marie-Emmanuelle Couprie, Eric Dupuy, Charles Agbehonou Kitegi, Vincent Leroux, Alexandre Loulergue, Fabrice Marteau, Laurent Stanislas Nadolski, Ryutaro Nagaoka, Thomas Souske (SOLEIL, Gif-sur-Yvette)

MOPOTK006 **Off-Energy Operation for the ESRF-EBS Storage Ring**

Author: Lina Hoummi, Thierry Brochard, Nicola Carmignani, Lee Robert Carver, Joel Chavanne, Simone Maria Liuzzo, Thomas Perron, Reine Versteegen, Simon Mathieu White (ESRF, Grenoble), Pantaleo Raimondi (SLAC, Menlo Park, California)

MOPOTK007 **Reverse Bend Option for a 6GeV Storage Ring Lattice**

Author: Lina Hoummi, Nicola Carmignani, Lee Robert Carver, Filippo Cianciosi, Simone Maria Liuzzo, Thomas Perron, Simon Mathieu White (ESRF, Grenoble)

MOPOTK008 **New Lattice Options for the ESRF Booster**

Author: Thomas Perron, Nicola Carmignani, Lee Robert Carver, Lina Hoummi, Simone Maria Liuzzo, Simon Mathieu White (ESRF, Grenoble), Pantaleo Raimondi (SLAC, Menlo Park, California)

MOPOTK009 **Basic Design Choices for the BESSY III MBA Lattice**

Author: Bettina Christa Kuske, Michael Abo-Bakr, Paul Goslawski (HZB, Berlin)

MOPOTK011 **Generalisation of the Genetic Lattice Construction (GLC) Algorithm**

Author: Stephan Reimann (GSI, Darmstadt; IAP, Frankfurt am Main), Holger Podlech (HFHF, Frankfurt am Main; IAP, Frankfurt am Main), Martin Droba, Oliver Meusel (IAP, Frankfurt am Main)

MOPOTK012 **CW Polarized Positron Beams for 12 GeV CEBAF**

Author: Sami Habet, Ryan Michael Bodenstein, Alex Bogacz, Joseph Michael Grames, Alicia Hofler, Reza Kazimi, Matt Poelker, Yves Raymond Roblin, Andrei Seryi, Riad Suleiman, Amy Sy, Dennis Turner, Yuhong Zhang (JLab, Newport News, Virginia), Eric Jean-Marie Voutier (LPSC, Grenoble Cedex), Fanglei Lin (ORNL RAD, Oak Ridge, Tennessee), Karl William Smolenski (Xelera Research LLC, Ithaca, New York)

MOPOTK013 **Machine Learning Based Surrogate Model Construction for Optics Matching at the European XFEL**

Author: Zihan Zhu, Ye Chen, Weilun Qin, Matthias Scholz, Sergey Tomin (DESY, Hamburg)

MOPOTK014 **Optics of a Recirculating Beamline for MESA**

Author: Christian Philipp Stoll, Atoosa Meseck (KPH, Mainz)

MOPOTK015 **ENUBET's Multi Momentum Secondary Beam Line**

Author: Elisabetta Giulia Parozzi (Universita Milano Bicocca, MILANO), Nikolaos Charitonidis (CERN, Geneva), Giulia Brunetti, Francesco Terranova (INFN MIB, MILANO; Universita Milano Bicocca, MILANO), Fabio Pupilli (INFN- Sez. di Padova, Padova), Andrea Longhin (INFN- Sez. di Padova, Padova; Univ. degli Studi di Padova, Padova)

MOPOTK016 **Arc Compressor Test in a Synchrotron - the ACTIS Project**

Author: Marcello Rossetti Conti, Alberto Bacci, Illya Drebot, Andrea Renato Rossi, Marcel Ruijter, Luca Serafini (INFN-Milano, Milano), Alessandro Curcio (CLPU, Villamayor), Simone Di Mitri (Elettra-Sincrotrone Trieste S.C.p.A., Basovizza), Vittoria Petrillo (INFN-Milano, Milano; Universita' degli Studi di Milano, Milano), Grzegorz Wawrzyniec Kowalski, Roman Panas, Adriana Izabela Wawrzyniak (NSRC SOLARIS, Krakow), Ezio Puppin (Politecnico/Milano, Milano)

MOPOTK017 **Update of Lattice Design of the SPring-8-II Storage Ring Towards 50 pmrad**

Author: Kouichi Soutome (JASRI/SPring-8, Hyogo-ken), Toshihiko Hiraiwa, Hitoshi Tanaka (RIKEN SPring-8 Center, Hyogo)

MOPOTK018 **Parallelization of Radia Magnetostatics Code**

Author: Anushka Banerjee (SBU, Stony Brook, New York), Oleg Chubar (BNL, Upton, New York), Joel Chavanne, Gaël Le Bec (ESRF, Grenoble), Jonathan Edelen, Christopher Hall, Boaz Nash (RadiaSoft LLC, Boulder, Colorado)

MOPOTK020 **Design Optimization of 100 mA Superconducting Linac**

Author: Man Yi (IMP/CAS, Lanzhou)

MOPOTK021 **Orbital Stability Analysis of Three Beamlines in Beam Distribution System of SHINE Facility**

Author: Xiaoxi Fu, Haixiao Deng, Bo Liu (SARI-CAS, Pudong, Shanghai), Si Chen, Ming Gu (SSRF, Shanghai)

MOPOTK022 **A Design Study of Injector System for Synchrotron Light Source**

Author: Chanmi Kim, Eun-San Kim, Chong Shik Park (KUS, Sejong)

MOPOTK023 **Beam Dynamics Studies on the 50 MeV Electron Linear Accelerator for Ultra-High Dose Rates**

Author: Yumi Lee, Chanmi Kim, Eun-San Kim, Chong Shik Park (KUS, Sejong), Heung-Soo Lee, Hyunseok Shin (VITZRONEXTECH, Ansan-si, Gyeonggi-do)

MOPOTK024 **Quasi-Frozen Spin Concept of Magneto-Optical Structure NICA Adapted to Study the Electric Dipole Moment of the Deuteron and Search Axion**

Author: Yury Senichev, Sergey Kolokolchikov, Aleksei A. Melnikov (RAS/INR, Moscow), Vladimir Ladygin, Evgeny Syresin (JINR/VBLHEP, Dubna, Moscow region), Nikolay Nikolaev (Landau ITP, Chernogolovka), Alexander Aksentyev (MEPhI, Moscow; RAS/INR, Moscow)

MOPOTK025 **Quantum Dynamics of Vortex Particles in EM Fields and the Quantum Busch Theorem**

Author: Dmitry Karlovets, Stanislav Baturin (ITMO University, Saint Petersburg)

MOPOTK026 **Ultralow 4D Emittance Measurements for keV Ultrafast Microdiffraction**

Author: William H Li, Matthew Benjamin Andorf, Adam Bartnik, Ivan Vasilyevich Bazarov, Cameron James Richard Duncan, Michael Kaemingk, Samuel Joseph Levenson, Jared Michael Maxson, Chad Pennington (Cornell University (CLASSE), Ithaca, New York), Matthew Allen Gordon, Young-Kee Kim (University of Chicago, Chicago, Illinois)

MOPOTK027 **Characterization of Various GaN Samples for Photoinjectors**

Author: Matthew Benjamin Andorf, Ivan Vasilyevich Bazarov, Samuel Joseph Levenson, Jared Michael Maxson (Cornell University (CLASSE), Ithaca, New York), Jimy Encomendero, Debdeep Jena, Vladamir Protasenko, Huili Grace Xing (Cornell University, Ithaca, New York)

MOPOTK028 **Zero Dispersion Optics to Improve Horizontal Emittance Measurements at the CERN Proton Synchrotron**

Author: Wietse Van Goethem, Foteini Asvesta, Hannes Bartosik, Alexander Huschauer (CERN, Geneva), Fanouria Antoniou (CERN, Meyrin)

MOPOTK029 **Improved Low-Energy Optics Control for Transverse Emittance Preservation at the CERN Proton Synchrotron**
Author: Wietse Van Goethem, Foteini Asvesta, Hannes Bartosik, Alexander Huschauer (CERN, Geneva), Fanouria Antoniou (CERN, Meyrin)

MOPOTK030 **Beam Optics Modelling Through Fringe Fields During Injection and Extraction at the CERN Proton Synchrotron**
Author: Eliott Philippe Johnson, Matthew Alexander Fraser (CERN, Geneva 23), Miroslav Georgiev Atanasov, Yann Dutheil (CERN, Geneva), Ewa Oponowicz (CERN, Meyrin)

MOPOTK031 **10 TeV Center of Mass Energy Muon Collider**
Author: Kyriacos Skoufaris, Christian Carli, Daniel Schulte (CERN, Meyrin)

MOPOTK032 **N-BPM Momentum Reconstruction for Linear Coupling Measurements in LHC and HL-LHC**
Author: Andreas Wegscheider (CERN, Meyrin), Rogelio Tomas (CERN, Geneva)

MOPOTK033 **Beamline Design and Optimisation for High Intensity Muon Beams at PSI**
Author: Eremey Vladimirovich Valetov (PSI, Villigen PSI)

MOPOTK034 **Energy Ramping Process for SPS-II Booster**
Author: Siriwan Jummunt, Supat Klinkhieo, Prapong Klysubun, Thapakron Pulampong, Porntip Sudmuang (SLRI, Nakhon Ratchasima)

MOPOTK035 **Beam-Based Diagnostics of Electric Guide Fields and Lattice Parameters for Run-1 of the Muon G-2 Storage Ring at Fermilab**
Author: David Alberto Tarazona (Cornell University (CLASSE), Ithaca, New York; MSU, East Lansing, Michigan), Vladimir Tishchenko (BNL, Upton, New York), James Mott (BUphy, Boston, Massachusetts), Jason David Crnkovic (Fermilab, Batavia, Illinois), Martin Berz, Kyoko Makino (MSU, East Lansing, Michigan), Michael James Syphers (Northern Illinois University, DeKalb, Illinois; Fermilab, Batavia, Illinois), Kim-Siang Khaw (Shanghai Jiao Tong University, Shanghai), Joseph Price (The University of Liverpool, Liverpool)

MOPOTK036 **Progress Towards Analytic Modelling of the VFFA**
Author: Max Emil Topp-Mugglestone, Suzanne L. Sheehy (JAI, Oxford), Jean-Baptiste Lagrange, Shinji Machida (STFC/RAL/ISIS, Chilton, Didcot, Oxon)

MOPOTK037 **Impact of Insertion Devices on the Diamond-II Lattice**
Author: Beni Singh, Richard Fielder, Hossein Ghasem, Jonas Kallestrup, Ian Martin, Teresia Olsson (DLS, Oxfordshire)

MOPOTK038 **BPM Analysis With Variational Autoencoders**
Author: Christopher Hall, Jonathan Edelen, Joshua Einstein-Curtis, Matthew Kilpatrick (RadiaSoft LLC, Boulder, Colorado)

MOPOTK039 **Iron Yoke Effects in Quadrupole Magnets for High Rigidity Isotope Beams**
Author: David Greene, Yoonhyuck Choi, Jon DeKamp, Peter Ostroumov, Mauricio Portillo, John Wenstrom, Ting Xu (FRIB, East Lansing, Michigan), Shashikant L. Manikonda (AML, Melbourne, Florida)

MOPOTK040 **Progress on the Measurement of Beam Size Using Sextupole Magnets**

Author:James Arthur Crittenden, Hannah Xiangxin Duan, Abigail Elizabeth Fagan, Georg H. Hoffstaetter, Vardan Khachatryan, David Sagan (Cornell University (CLASSE), Ithaca, New York)

MOPOTK041 **Magnetic Field Noise Search Using Turn-by-Turn Data at CESR**

Author: Vardan Khachatryan, John Barley, Marshall Hawthorne Berry, Antoine Chapelain, David Rubin, James P. Shanks, Suntao Wang (Cornell University (CLASSE), Ithaca, New York)

MOPOTK042 **Evaluation of Transverse Emittance Growth Due to Crab Cavity RF Noise in Electron-Ion Collider**

Author: He Huang, Shuai Zhao (ODU, Norfolk, Virginia), Yun Luo, Binping Xiao, Derong Xu (BNL, Upton, New York), Vasiliy Morozov, Yves Raymond Roblin, Todd Satogata, Yuhong Zhang (JLab, Newport News, Virginia)

MOPOTK043 **Wakefield Effects Evaluation on Nanometer Small Beam at KEK-ATF**

Author: Yuki Abe (Sokendai, Ibaraki), Kiyoshi Kubo, Toshiyuki Okugi, Nobuhiro Terunuma (KEK, Ibaraki; Sokendai, Ibaraki)

MOPOTK045 **Generation of High Emittance Ratios in High Charge Electron Beams at FACET-II**

Author: Obed Camacho (UCLA, Los Angeles), Aliaksei Halavanau, River Robles (SLAC, Menlo Park, California)

MOPOTK046 **Design Concept for the Second Interaction Region for Electron-Ion Collider**

Author: Bamunuvita Randika Gamage, Volker Burkert, Rolf Ent, Yulia Furletova, Douglas Higinbotham, Tim Michalski, Renuka Rajput-Ghoshal, Todd Satogata, Andrei Seryi, Christian Weiss, Yuhong Zhang (JLab, Newport News, Virginia), Elke Caroline Aschenauer, J. Scott Berg, Kirsten Angelika Drees, Alexander Jentsch, Alexander Kiselev, Christoph Montag, Robert B. Palmer, Brett Parker, Vadim Ptitsyn, Ferdinand J. Willeke, Holger Witte (BNL, Upton, New York), Walter Wittmer (JLab, Newport News), Charles E. Hyde (ODU, Norfolk, Virginia), Fanglei Lin, Vasiliy Morozov (ORNL RAD, Oak Ridge, Tennessee), Pawel Nadel-Turonski (SBU, Stony Brook, New York)

MOPOTK047 **Cooling Performance in a Dual Energy Storage Ring Cooler**

Author: Bhawin Dhital (ODU, Norfolk, Virginia), Yaroslav Serg Derbenev, David Douglas, He Zhang, Yuhong Zhang (JLab, Newport News, Virginia), Geoffrey Arthur Krafft (JLab, Newport News, Virginia; ODU, Norfolk, Virginia), Fanglei Lin, Vasiliy Morozov (ORNL RAD, Oak Ridge, Tennessee)

MOPOTK050 **Linac Optics Optimization With Multi-Objective Optimization**

Author: Isurumali Neththikumara (ODU, Norfolk, Virginia), Ryan Michael Bodenstein, Alex Bogacz (JLab, Newport News, Virginia), Todd Satogata (JLab, Newport News, Virginia; ODU, Norfolk, Virginia), Arthur Vandenhoeke (ULB, Bruxelles)

MOPOTK051 **Modeling a Nb3Sn Cryounit in GPT at UITF**

Author: Sunil Pokharel (ODU, Norfolk, Virginia), Alicia Hofler (JLab, Newport News, Virginia), Geoffrey Arthur Krafft (JLab, Newport News, Virginia; ODU, Norfolk, Virginia)

MOPOTK052 **CEBAF Injector Model for KL Beam Conditions**

Author: Sunil Pokharel (ODU, Norfolk, Virginia), Max Wilhelm Bruker, Joseph Michael Grames, Alicia Hofler, Reza Kazimi, Shukui Zhang (JLab, Newport News, Virginia), Geoffrey Arthur Krafft (JLab, Newport News, Virginia; ODU, Norfolk, Virginia)

MOPOTK053 **RLAs With FFA Arcs for Protons and Electrons**

Author: VVasiliy Morozov (ORNL RAD, Oak Ridge, Tennessee), J. Scott Berg, Stephen Brooks, Francois Meot, Dejan Trbojevic (BNL, Upton, New York), Georg H. Hoffstaetter (Cornell University (CLASSE), Ithaca, New York), David Douglas (Douglas Consulting, York, Virginia; JLab, Newport News, Virginia), Alexander Coxe (JLab, Newport News), Jay Benesch, Ryan Michael Bodenstein, Alex Bogacz, Bamunuvita Randika Gamage, Geoffrey Arthur Krafft, Rishi Mishra, Yves Raymond Roblin (JLab, Newport News, Virginia)

MOPOTK054 **Review of Alignment and Stability Tolerances for Advanced Light Sources**

Author: Aamna Khan, Sushil Sharma, Victor Smaluk (BNL, Upton, New York)

MOPOTK055 **Designing Round Beam Lattice for Electron Storage Rings with SLIM**

Author: Yongjun Li, Robert Rainer (BNL, Upton, New York)

MOPOTK056 **Data-Driven Chaos Indicator for Nonlinear Dynamics and Applications on Storage Ring Lattice Design**

Author: Yongjun Li, Robert Rainer (BNL, Upton, New York), Yi Jiao (IHEP,), Jinyu Wan (IHEP, Beijing), Allen Liu (Purdue University, West Lafayette, Indiana)

MOPOTK057 **Optics Matching for the EIC Electron Storage Ring at Various Energies**

Author: Daniel Marx - Brookhaven National Laboratory

MOPOTK058 **THz Radiation Emission From Undulators and Free-Electron Lasers (TEUFEL)**

Author: Ulf Lehnert (HZDR, Dresden)

MOPOTK059 **Implementation of the Vico-Greengard-Ferrando Poisson Solver in Synergia**

Author: Chong Shik Park (KUS, Sejong)

MOPOTK060 **An Induction-Type Septum Magnet for the eIC Complex**

Author: Nicholaos Tsoupas, Douglas Holmes, Chuyu Liu, Ioannis Marneris, Christoph Montag, Vadim Ptitsyn, Vahid Houston Ranjbar, Joseph Tuozzolo (BNL, Upton, New York), Bijan Bhandari (Brookhaven National Laboratory (BNL), Upton, New York)

MOPOTK062 **Numerical Calibration of the Bead-Pull Setup for Beam Coupling Impedance Evaluation**

Author: Dalia Mahmoud Fouda El Dali, Elias Métral, Carlo Zannini (CERN, Geneva), Giovanni De Michele, Stefano Fanella (AVO-ADAM, Meyrin)

MOPOTK063 **Plateau-Like Accelerating Wakefield for Electron-Witness-Bunch and Plateau-Like Decelerating Wakefield for Driver-Bunch in Plasma Wakefield Accelerator at High Transformer Ratio**
Author: Roman Ovsiannikov (KhNU, Kharkov), Iryna Pavlovna Levchuk (Yarovaya), Vasyl I. Maslov, Ivan N. Onishchenko (NSC/KIPT, Kharkov)

MOPOTK064 **Identical for Whole Electron-Witness-Bunch Accelerating Wakefield, During the Entire Acceleration Time at Wakefield Excitation by Long Electron Drive-Bunch**
Author: Roman Ovsiannikov (KhNU, Kharkov), Iryna Pavlovna Levchuk (Yarovaya), Vasyl I. Maslov, Ivan N. Onishchenko (NSC/KIPT, Kharkov)

MOPOTK065 **Design Optimisation Studies of Azimuthally Modulated RF Cavities**
Author: Laurence Matthew Wroe (JAI, Oxford), Manjit Dosanjh (CERN, Meyrin), Robert Apsimon (Cockcroft Institute, Lancaster), Suzanne L. Sheehy (The University of Melbourne, Melbourne, Victoria)

MOPOTK066 **Damping-Ring-Free Injector Design for Linear Colliders**
Author: Tianzhe Xu (Northern Illinois University, DeKalb, Illinois), Seongyeol Kim, John Gorham Power (ANL, Lemont, Illinois), Philippe Regis-Guy Piot (ANL, Lemont, Illinois; Northern Illinois University, DeKalb, Illinois), Masao Kuriki (HU/AdSM, Higashi-Hiroshima)

MOPOTK067 **High-Charge Transmission Diagnostics for Beam-Driven RF Structures**
Author: Eric Edson Wisniewski (ANL, Lemont, Illinois; Illinois Institute of Technology, Chicago, Illinois), Gongxiaohui Chen, Darrell Scott Doran, Seongyeol Kim, Wanming Liu, Xueying Lu, John Gorham Power, Charles Whiteford (ANL, Lemont, Illinois), Frank Stulle (BERGOZ Instrumentation, Saint Genis Pouilly), Xueying Lu, Dillon Merenich (Northern Illinois University, DeKalb, Illinois)

Jun 13, 2022 14:00 - 16:00 Poster Session Poster Area Matsaman

MOPOMS - Poster Session - Matsaman

MOPOMS001 **Progress on Development of the AXSIS THz-Accelerator Facility at DESY: A THz-Driven MeV Accelerator and keV X-Ray Source**
Author: Nicholas Hill Matlis, Mikhail Pergament (CFEL, Hamburg), Moein Fakhari, Dongfang Zhang (CFEL, Hamburg; DESY, Hamburg), Timm Rohwer (CFEL, Hamburg; Deutsches Elektronen Synchrotron (DESY) and Center for Free Electron Science (CFEL), Hamburg), Franz Xaver Kaertner (CFEL, Hamburg; Deutsches Elektronen Synchrotron (DESY) and Center for Free Electron Science (CFEL), Hamburg; The Hamburg Center for Ultrafast Imaging, University of Hamburg, Hamburg), Tobias Kroh (CFEL, Hamburg; The Hamburg Center for Ultrafast Imaging, University of Hamburg, Hamburg), Mostafa Vahdani (CFEL, Hamburg; University of Hamburg, Hamburg), Reza Bazrafshan (Deutsches Elektronen Synchrotron (DESY) and Center for Free Electron Science (CFEL), Hamburg; University of Hamburg, Hamburg)

MOPOMS002 **Compact Multi-Layered THz-Driven Photogun**
Author: Tobias Kroh, Nicholas Hill Matlis, Timm Rohwer (Deutsches Elektronen Synchrotron (DESY) and Center for Free Electron Science (CFEL), Hamburg), Moein Fakhari, Mikhail Pergament (CFEL, Hamburg), Franz Xaver Kaertner (Deutsches Elektronen Synchrotron (DESY) and Center for Free Electron Science (CFEL), Hamburg; The Hamburg Center for Ultrafast Imaging, University of Hamburg, Hamburg)

MOPOMS003 **Single-Sided Pumped Compact Terahertz Driven Booster Accelerator**

Author: Tobias Kroh, Reza Bazrafshan, Nicholas Hill Matlis (Deutsches Elektronen Synchrotron (DESY) and Center for Free Electron Science (CFEL), Hamburg), Moein Fakhari, Mikhail Pergament, Timm Rohwer, Mostafa Vahdani, Dongfang Zhang (CFEL, Hamburg), Franz Xaver Kaertner (Deutsches Elektronen Synchrotron (DESY) and Center for Free Electron Science (CFEL), Hamburg; The Hamburg Center for Ultrafast Imaging, University of Hamburg, Hamburg), Keigo Kawase (JAEA, Kizugawa)

MOPOMS004 **Optimization of Cs-Te-O Activation on GaAs Photocathode**

Author: Jai Kwan Bae, Matthew Benjamin Andorf, Ivan Vasilyevich Bazarov, Alice Galdi, Jared Michael Maxson (Cornell University (CLASSE), Ithaca, New York), Luca Cultrera (BNL, Upton, New York)

MOPOMS005 **Start-to-End Simulations of a THz-Driven ICS Source**

Author: Moein Fakhari, Yi-Kai Kan (DESY, Hamburg), Nicholas Hill Matlis (CFEL, Hamburg), Mostafa Vahdani (CFEL, Hamburg; University of Hamburg, Hamburg), Franz Xaver Kaertner (Deutsches Elektronen Synchrotron (DESY) and Center for Free Electron Science (CFEL), Hamburg; The Hamburg Center for Ultrafast Imaging, University of Hamburg, Hamburg)

MOPOMS006 **From Lossy THz Accelerating Waveguides to the Constant Gradient Design of a Dielectric Loaded Waveguide**

Author: Max Joseph Kellermeier, Thomas Vinatier (DESY, Hamburg), Ralph Wolfgang Assmann (DESY, Hamburg; LNF-INFN, Frascati), Wolfgang Carl Albert Hillert (University of Hamburg, Hamburg)

MOPOMS007 **Optimized Dielectric Loaded Waveguide Terahertz LINACs**

Author: Mostafa Vahdani (CFEL, Hamburg; University of Hamburg, Hamburg), Moein Fakhari (DESY, Hamburg), Franz Xaver Kaertner (Deutsches Elektronen Synchrotron (DESY) and Center for Free Electron Science (CFEL), Hamburg; The Hamburg Center for Ultrafast Imaging, University of Hamburg, Hamburg)

MOPOMS008 **Diagnosis of Transverse Emittance in Laser-Driven Ion Beam**

Author: Tatsuhiko Miyatake, Ibuki Takemoto, Yukinobu Watanabe (Kyushu University, Kasuga-Shi), Thanh-Hung Dinh, Kotaro Kondo, Masaharu Nishikino, Mamiko Nishiuchi, Hironao Sakaki (National Institutes for Quantum and Radiological Science and Technology, Kyoto)

MOPOMS010 **Beam Dynamics and Drive Beam Losses Within a Planar Dielectric Wakefield Accelerator**

Author: Toby Joseph Overton (Cockcroft Institute, Warrington, Cheshire), Yuri Saveliev (Cockcroft Institute, Warrington, Cheshire; STFC/DL/ASTeC, Daresbury, Warrington, Cheshire), Thomas Hywel Pacey (STFC/DL/ASTeC, Daresbury, Warrington, Cheshire), Guoxing Xia (UMAN, Manchester)

MOPOMS012 **Simulation Studies of Drive Beam Instability in a Dielectric Wakefield Accelerator**

Author: Wei Hou Tan (Northern Illinois University, DeKalb, Illinois), Axel Huebl (LBNL, Berkeley), Revathi Jambunathan, Remi Lehe, Andrew Myers, Jean-Luc Vay, Weiqun Zhang (LBNL, Berkeley, California), Philippe Regis-Guy Piot (Northern Illinois University, DeKalb, Illinois; ANL, Lemont, Illinois)

MOPOMS013 **Toward Emittance Measurement at 11.7 GHz Short-Pulse High-Gradient Photoinjector**
Author: Sergey Vladimirovich Kuzikov (Euclid TechLabs, Solon, Ohio), Gongxiaohui Chen, Eric Edson Wisniewski (ANL, Lemont, Illinois), Chunguang Jing (ANL, Lemont, Illinois; Euclid Beamlabs, Bolingbrook; Euclid TechLabs, Solon, Ohio), Philippe Regis-Guy Piot (ANL, Lemont, Illinois; Fermilab, Batavia, Illinois; Northern Illinois University, DeKalb, Illinois), Wei Hou Tan (Northern Illinois University, DeKalb, Illinois)

MOPOMS014 **Commissioning of a High-Gradient X-band RF Gun Powered by Short RF From a Wakefield Accelerator**
Author: Wei Hou Tan (Northern Illinois University, DeKalb, Illinois), Darrell Scott Doran, Gwanghui Ha, Wanming Liu, John Gorham Power, Jiahang Shao, Charles Whiteford, Eric Edson Wisniewski (ANL, Lemont, Illinois), Chunguang Jing (ANL, Lemont, Illinois; Euclid TechLabs, Solon, Ohio), Xueying Lu, Philippe Regis-Guy Piot (ANL, Lemont, Illinois; Northern Illinois University, DeKalb, Illinois), Sergey P. Antipov, Ernest William Knight, Sergey Vladimirovich Kuzikov (Euclid TechLabs, Solon, Ohio)

MOPOMS015 **Temporal and Spatial Characterization of Ultrafast Terahertz Near-Fields for Particle Acceleration**
Author: Annika Gabriel, Matthias Clemens Hoffmann, Emilio Alessandro Nanni, Mohamed Othman (SLAC, Menlo Park, California)

MOPOMS016 **Application of Nanostructures and Metamaterials in Accelerator Physics**
Author: Javier Resta-Lopez (ICMUV, Paterna), Carsten Peter Welsch (Cockcroft Institute, Warrington, Cheshire; The University of Liverpool, Liverpool), Oznur Apsimon, Cristian Bontoiu (The University of Liverpool, Liverpool), Guoxing Xia (UMAN, Manchester), Alexandre Bonatto (Universidade Federal de Ciências da Saúde de Porto Alegre, Porto Alegre)

MOPOMS017 **Beam Transport Simulations Through Final Focus High Energy Transport Lines With Implemented Gabor Lenses**
Author: Areso Sherjan, Martin Droba, Oliver Meusel, Katrin Isabell Thoma (IAP, Frankfurt am Main), Stephan Reimann (GSI, Darmstadt; IAP, Frankfurt am Main)

MOPOMS018 **Tungsten Electron Emitter (TE^2) With Direct Heated Cathode by Plasma Stream**
Author: Katrin Isabell Thoma, Kathrin Silvana Schulte-Urlichs (GSI, Darmstadt; IAP, Frankfurt am Main), Thomas Dönges, Martin Droba, Oliver Meusel, Holger Podlech (IAP, Frankfurt am Main)

MOPOMS019 **The New SPARC_LAB RF Photo-Injector**
Author: David Alesini, Maria Pia Anania, Marco Bellaveglia, Angelo Biagioni, Fabio Cardelli, Gemma Costa, Giampiero Di Pirro, Luigi Faillace, Massimo Ferrario, Giovanni Franzini, Alessandro Gallo, Anna Giribono, Luca Piersanti, Lucia Sabbatini, Angelo Stella, Alessandro Vannozzi (INFN/LNF, Frascati), Antonio Battisti, Gianluca Di Raddo, Andrea Liedl, Valerio Lollo, Luigi Pellegrino, Riccardo Pompili, Stefano Romeo, Vladimir Shpakov, Cristina Vaccarezza (LNF-INFN, Frascati), Enrica Chiadroni (LNF-INFN, Frascati; Sapienza University of Rome, Rome), Alessandro Cianchi, Mario Galletti (Università di Roma II Tor Vergata, Roma)

MOPOMS020 **Dark Current Studies for a High Gradient SW C-Band RF Gun**
Author: Fabio Cardelli, David Alesini, Luigi Faillace, Anna Giribono, Alessandro Vannozzi (INFN/LNF, Frascati), Gianluca Di Raddo (LNF-INFN, Frascati), Thomas Geoffrey Lucas (PSI, Villigen PSI)

MOPOMS021 **The new C Band Gun for the next generation RF photo-injectors**

Author: David Alesini, Massimo Ferrario, Anna Giribono, Alessio Gizzi, Alessandro Vannozzi (INFN/LNF, Frascati), Giovanni Castorina (AVO-ADAM, Meyrin), Michele Croia (ENEA Casaccia, Roma), Luca Ficcadenti (INFN-Roma, Roma), Fabio Cardelli, Gianluca Di Raddo, Luigi Faillace, Stefano Lauciani, Andrea Liedl, Luigi Pellegrino (LNF-INFN, Frascati), Giuseppe Pedrocchi (SBAI, Roma)

MOPOMS022 **Studies of a Ka-Band High Power Klystron Amplifier at INFN-LNF**

Author: Mostafa Behtouei, Luigi Faillace, Bruno Spataro (LNF-INFN, Frascati), Giuseppe Torrisi (INFN/LNS, Catania), Andrea Mostacci (LNF-INFN, Frascati; Sapienza University of Rome, Rome), Fabio Bosco, Martina Carillo, Mauro Migliorati, Luigi Palumbo (Sapienza University of Rome, Rome), Franco Di Paolo, Stefano Fantauzzi, Alberto Leggieri, Fabrizio Marrese, Lorenzo Valletti (Università degli Studi di Roma "Tor Vergata", Roma)

MOPOMS023 **Start-to-End Beam-Dynamics Simulations of a Compact C-Band Electron Beam Source for High Spectral Brilliance Applications**

Author: Luigi Faillace, Mostafa Behtouei, Bruno Spataro, Cristina Vaccarezza (LNF-INFN, Frascati), Anna Giribono (INFN/LNF, Frascati), Alex Murokh (RadiaBeam, Marina del Rey, California), Ronald Agustsson, Ivan Ivanov Gadjev, Sergey V Kutsaev (RadiaBeam, Santa Monica, California), David Leslie Bruhwiler (RadiaSoft LLC, Boulder, Colorado), Sami Tantawi (SLAC, Menlo Park, California), Fabio Bosco, Martina Carillo, Lucia Giuliano, Mauro Migliorati, Andrea Mostacci, Luigi Palumbo (Sapienza University of Rome, Rome), Obed Camacho (UCLA, Los Angeles), Atsushi Fukasawa, Nathan Majernik, James Rosenzweig, Oliver Williams (UCLA, Los Angeles, California)

MOPOMS024 **Ponderomotive Scattering of Ultrafast and Ultracold Electron Bunches**

Author: Tim Christiaan Hendrik de Raadt, Jim Gerardus Hubertus Franssen, Jom Luiten, Daniel Ferdinand Jan Nijhof, Brian Schaap (TUE, Eindhoven)

MOPOMS025 **Photocathode Performance Characterisation of Ultra-Thin MgO Films on Polycrystalline Copper**

Author: Christopher Benjamin (STFC/DL/ASTeC, Daresbury, Warrington, Cheshire; University of Warwick, Coventry), Hugh Michael Churn, Lee Jones, Tim Noakes (Cockcroft Institute, Warrington, Cheshire; STFC/DL/ASTeC, Daresbury, Warrington, Cheshire), Gavin Bell, Thomas Rehaag (University of Warwick, Coventry)

MOPOMS027 **Synthesis of First Cesium Telluride Photocathode at ASTeC Using Sequential and Co-Deposition Method.**

Author: Reza Valizadeh, Adrian Hannah (STFC/DL/ASTeC, Daresbury, Warrington, Cheshire), Sven Lederer (DESY, Hamburg), Vinod Dhanak (The University of Liverpool, Liverpool)

MOPOMS028 **Stability and Lifetime Studies of Carbon Nanotube for Electron Cooling in ELENA**

Author: Bruno Galante, Gerard Tranquille (CERN, Meyrin), Carsten Peter Welsch (Cockcroft Institute, Warrington, Cheshire; The University of Liverpool, Liverpool), Javier Resta-Lopez (ICMUV, Paterna; Cockcroft Institute, Warrington, Cheshire; The University of Liverpool, Liverpool)

MOPOMS029 **HPC Modeling of a High-Gradient C-Band Linac for Hard X-Ray Free-Electron Lasers**

Author: Trudy Beth Bolin, Sandra Biedron (UNM-ECE, Albuquerque)

MOPOMS030 **Copropagating Schemes for Dielectric Laser Accelerators (DLAs)**

Author: Giuseppe Torrisi, David Mascali, Giorgio Sebastiano Mauro, Atiya Usmani (INFN/LNS, Catania), Marta Maria Costanza (DIEEI, Catania), Alberto Bacci (INFN-Milano, Milano), Gino Sorbello (INFN/LNS, Catania; University of Catania, Catania), Costantino De Angelis, Andrea Locatelli (University of Brescia, Brescia)

MOPOMS031 **Compact Terahertz-Compression Based Electron Gun**

Author: Timm Rohwer, Tobias Kroh (Deutsches Elektronen Synchrotron (DESY) and Center for Free Electron Science (CFEL), Hamburg), Dongfang Zhang (CFEL, Hamburg), Moein Fakhari (CFEL, Hamburg; DESY, Hamburg), Nicholas Hill Matlis (CFEL, Hamburg; Deutsches Elektronen Synchrotron (DESY) and Center for Free Electron Science (CFEL), Hamburg), Mostafa Vahdani (CFEL, Hamburg; University of Hamburg, Hamburg), Franz Xaver Kaertner (Deutsches Elektronen Synchrotron (DESY) and Center for Free Electron Science (CFEL), Hamburg; The Hamburg Center for Ultrafast Imaging, University of Hamburg, Hamburg), Reza Bazrafshan (Deutsches Elektronen Synchrotron (DESY) and Center for Free Electron Science (CFEL), Hamburg; University of Hamburg, Hamburg), Keigo Kawase (QST, Tokai)

MOPOMS032 **Compact Two Octave Spanning Perpendicular Kicker of MeV Electrons Based on a Cubic Magnet Dipole Array**

Author: Timm Rohwer, Nicholas Hill Matlis (Deutsches Elektronen Synchrotron (DESY) and Center for Free Electron Science (CFEL), Hamburg), Franz Xaver Kaertner (CFEL, Hamburg; Deutsches Elektronen Synchrotron (DESY) and Center for Free Electron Science (CFEL), Hamburg; The Hamburg Center for Ultrafast Imaging, University of Hamburg, Hamburg), Pavel Vagin (DESY, Hamburg), Reza Bazrafshan (Deutsches Elektronen Synchrotron (DESY) and Center for Free Electron Science (CFEL), Hamburg; University of Hamburg, Hamburg)

MOPOMS033 **Emittance Measurements of Nanoblade-Enhanced High Field Cathode**

Author: Gerard Emile Lawler, Nathan Majernik, Joshua Isaac Mann, Nathan Montanez, James Rosenzweig (UCLA, Los Angeles, California), Victor Yu (RadiaBeam, Santa Monica, California)

MOPOMS034 **Material Normal Energy Distribution for Field Emission Analyses From Monocrystalline Surfaces**

Author: Joshua Isaac Mann, Yiming Li, James Rosenzweig (UCLA, Los Angeles, California), Tomas Arias, Johannes Kevin Nangoi (Cornell University, Ithaca, New York)

MOPOMS035 **C-Band Infrastructure at MOTHRA**

Author: James Rosenzweig, Atsushi Fukasawa, Gerard Emile Lawler, Nathan Majernik, Jake Riley Parsons, Yusuke Sakai, Oliver Williams (UCLA, Los Angeles, California), Zenghai Li, Sami Tantawi (SLAC, Menlo Park, California), Monika Yadav (The University of Liverpool, Liverpool; UCLA, Los Angeles, California)

MOPOMS036 **Simulations of Laser Field Emission From Nanostructures With Image Charge Trapping and Band Structure Transitions**

Author: Benjamin Wang, Gerard Emile Lawler, Joshua Isaac Mann, James Rosenzweig (UCLA, Los Angeles, California), Siddharth Karkare (Arizona State University, Tempe), Tomas Arias, Johannes Kevin Nangoi (Cornell University, Ithaca, New York)

MOPOMS037 **Progress Towards the High-Current Operation and Potential of Polarized Electron Beam Generation From the BNL SRF Gun**

Author: Irina Petrushina (SUNY SB, Stony Brook, New York), Vladimir N. Litvinenko (BNL, Upton, New York; Stony Brook University, Stony Brook)

MOPOMS039 **Study of Material Choice in Beam Dumps for Energetic Electron Beams**
Author: Dajun Zhu, Rohan Dowd, Yaw-Ren Eugene Tan (AS - ANSTO, Clayton)

MOPOMS040 **Radiation Shielding Design Review for the X-Band Radio-Frequency Test Facility at the University of Melbourne**
Author: Matteo Volpi, Roger Paul Rassool, Geoffrey Taylor, Scott David Williams (The University of Melbourne, Melbourne, Victoria), Suzanne L. Sheehy (ANSTO, Kirrawee DC New South Wales; The University of Melbourne, Melbourne, Victoria), Rohan Dowd (AS - ANSTO, Clayton), Marça Boronat, Nuria Catalan-Lasheras (CERN, Meyrin), David Banon-Caballero (IFIC, Valencia)

MOPOMS041 **Concrete Shielding Activation for Proton Therapy Systems Using BDSIM and FISPACT-II**
Author: Eliott Ramoisiaux, Eustache Gnacadja, Nicolas Pauly, Robin Tesse, Marion Vanwelde (ULB, Bruxelles), Cédric Hernalsteens (CERN, Meyrin; ULB, Bruxelles), Frederic Stichelbaut (IBA, Louvain-la-Neuve)

MOPOMS042 **Comparison Between Run 2 Radiation Level Measurements and FLUKA Simulations in the CERN LHC Tunnel of the ATLAS Insertion**
Author: Daniel Prelipcean, Alessia Ciccotelli (CERN, Geneva 23), Kacper Bilko (CERN, Geneva), Francesco Cerutti, Ruben Garcia Alia, Giuseppe Lerner, Marta Sabate-Gilarte (CERN, Meyrin), Barbara Humann (TU Vienna, Wien; CERN, Meyrin

MOPOMS043 **Automated Analysis of the Prompt Radiation Levels in the CERN Accelerator Complex**
Author: Kacper Bilko (CERN, Geneva 23), Ruben Garcia Alia, Jean-Baptiste Potoine (CERN, Meyrin)

MOPOMS044 **Implications and Mitigation of Radiation Effects on the CERN SPS Operation During the Machine Commissioning of Run 3**
Author: Ygor Quadros Aguiar (CERN, Geneva 23), Kacper Bilko, Salvatore Danzeca (CERN, Geneva), Andrea Apollonio, Matteo Brucoli, Matteo Cecchetto, Ruben Garcia Alia, Tomasz Ladzinski, Giuseppe Lerner, Jean-Baptiste Potoine, Alessandro Zimmaro (CERN, Meyrin)

MOPOMS045 **Vacuum Control System Upgrade for ALPI Accelerator**
Author: Giovanni Savarese, Loris Antoniazzi, Damiano Bortolato, Andrea Conte, Fabio Gelain, Davide Marcato, Carlo Roncolato (INFN/LNL, Legnaro (PD))

MOPOMS046 **Reliability Analysis of the HL-LHC Energy Extraction System**
Author: Milosz Robert Blaszkiewicz, Andrea Apollonio, Thomas Cartier-Michaud, Bozhidar Ivanov Panev, Daniel Wollmann (CERN, Geneva), Mirko Pojer (CERN, Meyrin)

MOPOMS047 **Control and Functional Safety Systems Design for Real-Time Conditioning of RF Structures at TEX**
Author: Stefano Pioli, Riccardo Gargana, Daniele Moriggi (LNF-INFN, Frascati), Fabio Cardelli, Paolo Ciuffetti, Claudio Di Giulio (INFN/LNF, Frascati)

MOPOMS048 **Fast Trigger System for Beam Abort System in SuperKEKB**
Author: Hitomi Ikeda, Toshihiro Mimashi, Shu Nakamura, Toshiyuki Oki, Shinya Sasaki (KEK, Ibaraki)

MOPOMS049 **A Method for Generation of Relativistic Vortex Leptons and Hadrons at Linear Accelerators**
Author: Dmitry Karlovets, Stanislav Baturin (ITMO University, Saint Petersburg), Valeriy Georgievich Serbo (NSU, Novosibirsk)

MOPOMS050 **Rigorous Approach for Calculation of Radiation of a Charged Particle Bunch Exiting an Open-Ended Dielectrically Loaded Waveguide**
Author: Sergey N. Galyamin (Saint Petersburg State University, Saint Petersburg), Stanislav Baturin (ITMO University, Saint Petersburg)

MOPOMS051 **Analysis of Powering Tests and Operational Data With Sigmon**
Author: Aleksandra Mnich, Jean-Christophe Garnier, Daniel Wollmann (CERN, Geneva)

MOPOMS052 **6 MeV Novel Hybrid (Standing Wave - Traveling Wave) Photo-Cathode Electron Gun for a THz Superradiant FEL**
Author: Ariel Nause, Dmitri Borodin, Aharon Friedman (Ariel University, Ariel), Bruno Spataro (LNF-INFN, Frascati), Atsushi Fukasawa, James Rosenzweig (UCLA, Los Angeles, California)

Tue, June 14, 2022

Jun 14, 2022 09:00 - 09:30 Oral Session Grand Diamond Ballroom

TUIXGD - Invited Orals:Beam Instrumentation, Controls, Feedback and Op. Aspects

TUIXGD1 **Accurate and Confident Prediction of Electron Beam Longitudinal Properties Using Spectral Virtual Diagnostics**
Author: Adi Hanuka (SLAC, Menlo Park, California)

Jun 14, 2022 09:30 - 10:30 Oral Session Grand Diamond Ballroom

TUOXGD - Contributed Orals: Beam Instrumentation, Controls, Feedback and Op. Aspects

TUOXGD1 **Design and Construction of Optical System of the Coronagraph for Beam Halo Observation in the SuperKEKB**
Author: Gaku Mitsuka, Hitomi Ikeda, Toshiyuki Mitsuhashi (KEK, Ibaraki)

TUOXGD2 **Wireless IoT in Particle Accelerators: A Practical Approach With the IoT Radiation Monitor at CERN**
Author: Salvatore Danzeca, Rodrigo Sierra (CERN, Geneva), Antony John Cass, Alessandro Masi, Alessandro Zimmaro (CERN, Meyrin)

TUOXGD3 **6D Phase Space Diagnostics Based on Adaptively Tuned Physics-Informed Generative Convolutional Neural Networks**
Author: Alexander Scheinker (LANL, Los Alamos, New Mexico), Daniele Filippetto (LBNL, Berkeley, California), Frederick (Eric) William Cropp V (UCLA, Los Angeles)

Jun 14, 2022 09:00 - 09:30 Oral Session Sapphire 204-205

TUIXSP - Invited Orals: Accelerator Technology

TUIXSP1 **Recent Achievements in the NEG Technology in Application to Coating Vacuum Chambers of Constrained Geometries**
Author: Sol Omolayo (LBNL, Berkeley, California), Charles Hetzel (BNL, Upton, New York)

Jun 14, 2022 09:30 - 10:30 Oral Session Sapphire 204-205

TUOXSP - Contributed Orals: Accelerator Technology

TUOXSP1 **Origin and Mitigation of the Beam-induced Surface Modifications of the LHC Beam Screens**
Author: Valentine Petit, Paolo Chiggiato, Marcel Himmerlich, Stefano Marinoni, Holger Neupert, Mauro Taborelli, Laurent Tavian (CERN, Geneva)

TUOXSP2 **Analysis of Low RRR SRF Cavities**
Author: Katrina Howard, Young-Kee Kim (University of Chicago, Chicago, Illinois), Daniel Bafia, Anna Grassellino (Fermilab, Batavia, Illinois)

TUOXSP3 **Evaluation of Geometrical Precision and Surface Roughness Quality for the Additively Manufactured Radio Frequency Quadrupole Prototype**
Author: Toms Torims, Dagnija Krogere, Guntis Pikurs, Andris Ratkus (Riga Technical University, Riga), Ahmed Cherif (CERN, Geneva), Maurizio Vretenar (CERN, Meyrin), Samira Gruber, Elena Lopez (Fraunhofer IWS, Dresden), Maurizio Vedani (POLIMI, Milano), Maurizio Foppa Pedretti, Mateo Pozzi (Rösler Italiana s.r.l., Concorezzo), Michael Thielmann, Philipp Wagenblast (TRUMPF, Ditzingen), Tauno Otto (TalTech, Tallinn), Nicolas Delerue (Université Paris-Saclay, CNRS/IN2P3, IJCLab, Orsay)

Jun 14, 2022 11:00 - 12:30 Oral Session Grand Diamond Ballroom

TUIYGD - Invited Orals: Hadron Accelerators

TUIYGD1 **The Status of the European Spallation Source**
Author: Andreas Jansson (ESS, Lund)

TUIYGD2 **Present Status and Future Plan With Charge Stripper Ring at RIKEN RIBF**
Author: Hiroshi Imao (RIKEN Nishina Center, Wako)

TUIYGD3 **FRIB Commissioning and Early Operations**

Author: Jie Wei, Hiroyuki Ao, Steven Beher, Georg Bollen, Nathan Bultman, Fabio Casagrande, Wei Chang, Yoonhyuck Choi, Scott Cogan, Chris Compton, Marco Cortesi, John Christopher Curtin, Kelly Douglas Davidson, Xiaoji Du, Kyle Elliott, Brandon Ewert, Adam Fila, Kei Fukushima, Venkatarao Ganni, Andrei Ganshyn, Thomas Glasmacher, Junwei Guo, Yue Hao, Walter Hartung, Nusair Hasan, Marc Hausmann, Kent Holland, Hsiao-Chaun Hseuh, Masanori Ikegami, Devin Danail Jager, Shelly Jones, Nathan Joseph, Takuji Kanemura, Sang-Hoon Kim, Cody Knowles, Peter Knudsen, Taro Konomi, Brandon Kortum, Tanner Lange, Michael Larmann, Thomas Leigh Larter, Kaustubh Laturkar, John LeTourneau, ZhiYong Li, Steven Michael Lidia, Guillaume Machicoane, Chris Magsig, Peter Manwiller, Felix Marti, Tomofumi Maruta, Ethan Metzgar, Samuel J. Miller, Dan Morris, Martin Mugerian, Igor Nesterenko, Chinh Nguyen, Peter Ostroumov, Mohit Patil, Alexander Plastun, John Thomas Popielarski, Laura Popielarski, Mauricio Portillo, John Priller, Xing Rao, Marc Reaume, Haitao Ren, Kenji Saito, Bradley Sherrill, Andreas Stolz, Bryan Tousignant, Roben Walker, Xiaole Wang, John Wenstrom, Genevieve West, Ken Witgen, Mathew Wright, Ting Xu, Tracy Xu, Yoshishige Yamazaki, Tong Zhang, Qiang Zhao, Shen Zhao (FRIB, East Lansing, Michigan), Michael Kelly (ANL, Lemont, Illinois), Yoichi Momozaki (ANL, Lemont, Illinois; FRIB, East Lansing, Michigan), Alberto Facco (FRIB, East Lansing, Michigan; INFN/LNL, Legnaro (PD)), Robert Edward Laxdal (FRIB, East Lansing, Michigan; TRIUMF, Vancouver), Mark Wiseman (JLab, Newport News, Virginia), Kenji Hosoyama (KEK, Ibaraki), Ben Arend, Tom Ginter, Elaine Kwan, Mallory Smith, Mathias Steiner, Oleg Tarasov (NSCL, East Lansing, Michigan)

Jun 14, 2022 11:00 - 12:30 Oral Session Sapphire 204-205

TUIYSP - Invited Orals: Photon Sources and Electron Accelerators

TUIYSP1 **Science Highlights From Hard X-Ray FELs**

Author: Thomas Tschentscher (EuXFEL, Hamburg)

TUIYSP2 **Self-Amplification of Coherent Energy Modulation in Seeded Free-Electron Lasers**

Author: Haixiao Deng (SINAP, Shanghai)

TUIYSP3 **Research and Development Towards Cavity-Based X-ray Free-Electron Lasers**

Author: Gabriel Marcus (SLAC, Menlo Park, California)

Jun 14, 2022 14:00 - 15:00 Oral Session Grand Diamond Ballroom

TUIZGD - Invited Orals: Applications of Accel., Tech. Transfer and Industrial Rel.

TUIZGD1 **An ERL-Driven Intense Compton Source Above 100 keV and Other ERL Applications**

Author: Gabriel Marcus (SLAC, Menlo Park, California)

TUIZGD2 **RIKEN Accelerator-Driven Compact Neutron Systems, RANS Project and Their Capabilities**
Author: Yoshie Otake (RIKEN, Wako)

Jun 14, 2022 14:00 - 15:00 Oral Session Grand Diamond Ballroom

TUIZGD - Invited Orals: Applications of Accel., Tech. Transfer and Industrial Rel.

TUOZGD1 **Need for Portable Accelerators in Cultural Heritage**
Author: Tessa Charles (The University of Liverpool, Liverpool), Ryan Michael Bodenstein, Alejandro Castilla (JLab, Newport News, Virginia)

TUOZGD2 **A Compact Synchrotron for Advanced Cancer Therapy With Helium and Proton Beams**
Author: Maurizio Vretenar, Maria Elena Angoletta, Kristaps Palskis (CERN, Meyrin), Luca Bottura, Rebecca Louise Taylor (CERN, Geneva), Jan Borburgh, Gerard Tranquille (CERN, Geneva 23), Giovanni Bisoffi (INFN/LNL, Legnaro (PD)), Mariusz Sapinski (PSI, Villigen PSI), Elena Benedetto (SEEIIST, Geneva)

TUOZGD3 **Rapid RF-Driven 3D Pencil Beam Scanning for Proton Therapy**
Author: Emma Snively, Valery Dolgashev, Gregory Peter Le Sage, Zenghai Li, Emilio Alessandro Nanni, Dennis Thomas Palmer, Sami Tantawi (SLAC, Menlo Park, California), Reinhard Wilhelm Schulte (LLU, Loma Linda), Mark Pankuch (Northwestern University, Warrenville, Illinois), Bruce Alan Faddegon, Jose Ramos Mendez (UCSF, San Francisco, California)

Jun 14, 2022 14:00 - 15:00 Oral Session Sapphire 204-205

TUIZSP - Invited Orals: Circular and Linear Colliders

TUIZSP1 **Status of the Circular e+e- Collider Projects in Asia and Europe: CEPC and FCC-ee**
Author: Xinchou Lou (IHEP, Beijing), Frank Zimmermann (CERN, Geneva), Manuela Boscolo (LNF-INFN, Frascati)

TUIZSP2 **Muon Colliders: Where Are We?**
Author: Daniel Schulte (CERN, Meyrin)

Jun 14, 2022 15:00 - 16:00 Oral Session Sapphire 204-205

TUOZSP - Contributed Orals: Circular and Linear Colliders

TUOZSP1 **Prospects for Optics Measuements in FCC-ee**
Author: Jacqueline Keintzel, Rogelio Tomas, Frank Zimmermann (CERN, Geneva)

TUOZSP2 **Chromatic X-Y Coupling Correction by Tilting Sextupole Magnets in the SuperKEKB Positron Ring**
Author: Mika Masuzawa, Kazumi Egawa, Yoshihiro Funakoshi, Takashi Kawamoto, Haruyo Koiso, Akio Morita, Kazuhito Ohmi, Yukiyoshi Ohnishi, Yasunobu Ohsawa, Toshiyuki Oki, Ryuhei Sugahara, Hiroshi Sugimoto, Ryuichi Ueki, Demin Zhou (KEK, Ibaraki), Katsunobu Oide (CERN, Meyrin)

TUOZSP3 **The European ERL Roadmap**
Author: Andrew Hutton (JLab, Newport News, Virginia), Bettina Christa Kuske (HZB, Berlin), Max Klein (The University of Liverpool, Liverpool)

Jun 14, 2022 16:00 - 18:00 Poster Session Poster Area Somtum

TUPOST - Poster Session - Somtam

TUPOST001 **Parasitic Optimization of the Transfer Beamline Efficiency at ELSA**
Author: Sebastian Witt, Klaus Desch, Daniel Elsner, Dennis Proft (ELSA, Bonn)

TUPOST002 **Upgrade of the 25 MW RF Station for the Linear Accelerator LINAC2 at ELSA**
Author: Dennis Proft, Klaus Desch, Daniel Elsner, Michael Thomas Switka (ELSA, Bonn)

TUPOST003 **Frequency Mixing Experiments at Soft X-ray Undulator of the European XFEL**
Author: Evgeny Schneidmiller, Frank Brinker, Winfried Decking, Marc Walter Guetg, Theophilos Maltezopoulos, Dirk Noelle, Sergey Tomin, Mikhail Yurkov (DESY, Hamburg), Gianluca Geloni, Jan Grünert, Svitozar Serkez (EuXFEL, Schenefeld)

TUPOST004 **A New Attosecond Scheme for XUV and Soft X-Ray FELs**
Author: Evgeny Schneidmiller (DESY, Hamburg)

TUPOST005 **RF Voltage Calibration Using Phase Space Tomography in the CERN SPS**
Author: Danilo Quartullo, Simon Christopher Paul Albright, Heiko Damerau, Alexandre Lasheen, Giulia Papotti (CERN, Meyrin), Charilaos Zisou (CERN, Geneva 23)

TUPOST006 **Frequency-Dependent RF Voltage Calibration Using Longitudinal Tomography in the CERN PSB**
Author: Danilo Quartullo, Simon Christopher Paul Albright, Heiko Damerau (CERN, Meyrin)

TUPOST007 **New Generation of Very Low Noise Beam Position Measurement System for the LHC Transverse Feedback**
Author: Daniel Valuch (CERN, Meyrin), Viera Stopjakova (Slovak University of Technology (STU), Bratislava)

TUPOST008 **Digital Low-Level RF System for the CERN Linac3 Accelerator**
Author: Daniel Valuch, Sindre Jacobsen Faeroe, Giampaolo Piccinini (CERN, Geneva 23), Reyes Alemany-Fernandez, Ylenia Brischetto, Martin Einar Soderen (CERN, Geneva)

TUPOST009 **Online Correction of Laser Focal Position Using FPGA-Based ML Models**

Author: Joshua Einstein-Curtis, Stephen James Coleman, Nathan M. Cook, Jonathan Edelen (RadiaSoft LLC, Boulder, Colorado), Samuel Krebsbach Barber, Curtis Berger, Jeroen van Tilborg (LBNL, Berkeley, California)

TUPOST010 **Advanced Controls Framework Enabled Through Data Science**

Author: Trudy Beth Bolin, Sandra Biedron, David Caulton (Element Aero, Chicago)

TUPOST011 **Simulation Studies of Intra-Train, Bunch-by-Bunch Feedback Systems at the International Linear Collider**

Author: Rebecca Ramjiawan, Philip Burrows, Colin Perry (JAI, Oxford), Douglas Robert Bett (CERN, Geneva; JAI, Oxford), Glenn Brian Christian (DLS, Oxfordshire), Ryan Michael Bodenstein (JLab, Newport News, Virginia)

TUPOST012 **Sirius Storage Ring RF Plant Identification**

Author: David Daminelli, Felipe Koji Godinho Hoshino, André Pontes Barbosa Lima (LNLS, Campinas), Matheus Souza (UNICAMP, Campinas, São Paulo)

TUPOST013 **Concept and Development of 64 kW Solid State RF Amplifiers for Sirius' Storage Ring**

Author: Mark Hoffmann Wallner, André Pontes Barbosa Lima (LNLS, Campinas), Ruy Farias (CNPEM, Campinas, SP)

TUPOST014 **Current Status of Sirius Storage Ring RF System**

Author: André Pontes Barbosa Lima, David Daminelli, Mark Hoffmann Wallner, Felipe Koji Godinho Hoshino (LNLS, Campinas), Iago Carvalho de Almeida, Ruy Farias (CNPEM, Campinas, SP)

TUPOST015 **Commissioning and First Results of an X-Band LLRF System for TEX Test Facility at LNF-INFN**

Author: Luca Piersanti, David Alesini, Marco Bellaveglia, Simone Bini, Bruno Buonomo, Fabio Cardelli, Claudio Di Giulio, Enrico Di Pasquale, Marco Diomede, Luigi Faillace, Antonio Falone, Giovanni Franzini, Alessandro Gallo, Giacomo Giannetti, Andrea Liedl, Daniele Moriggi, Stefano Pioli, Sergio Quaglia, Lucia Sabbatini, Michele Scampati, Giorgio Scarselletta, Angelo Stella, Simone Tocci, Luca Zelinotti (LNF-INFN, Frascati)

TUPOST016 **Status of LLRF and Resonance Control Dedicated Algorithms Extension for PolFEL**

Author: Wojciech Jalmuzna, Wojciech Cichalewski, Andrzej Napieralski, Przemyslaw Marcin Sekalski (TUL-DMCS, Lodz)

TUPOST017 **PEG Contribution to the LLRF System for Superconducting Elliptical Cavities of ESS Accelerator Linac**

Author: Wojciech Cichalewski, Grzegorz Wojciech Jablonski, Kacper Klys, Dariusz Radoslaw Makowski, Aleksander Mielczarek, Andrzej Napieralski, Piotr Perek, Pawel Plewinski (TUL-DMCS, Lodz), Morten Jensen (ESS, Lund), Anders Johansson, Anders Svensson (Lund University, Lund), Piotr Robert Bartoszek, Konrad Chmielewski, Krzysztof Kostrzewa, Tomasz Kowalski, Dominik Rybka, Maciej Sitek, Jaroslaw Szewinski, Zbigniew Wojciechowski (NCBJ, Swierk/Otwock), Adam Abramowicz, Krzysztof Czuba, Maciej Grzegrzolka, Krzysztof Oliwa, Igor Rutkowski, Wojciech Wierba (Warsaw University of Technology, Warsaw)

TUPOST018 **Long Pulse Operation of the E-XFEL Cryomodule**
Author: Wojciech Cichalewski (TUL-DMCS, Lodz), Jacek Sekutowicz (DESY, Hamburg)

TUPOST019 **Evaluation of PIP-II Master Oscillator Components**
Author: Igor Rutkowski, Krzysztof Czuba, Andzej Serlat (Warsaw University of Technology, Warsaw), Brian Edward Chase, Ed Cullerton (Fermilab, Batavia, Illinois)

TUPOST021 **The CERN SPS Low Level RF: The Beam Control**
Author: Arthur Spierer, Philippe Baudrenghien, Julien Egli, Maciej Suminski, Tomasz Wlostowski (CERN, Geneva), Gregoire Hagmann, Predrag Kuzmanovic, Ireneusz Stachon (CERN, Geneva 23)

TUPOST022 **The CERN SPS Low Level RF: Lead ions acceleration**
Author: Philippe Baudrenghien, Julien Egli, Arthur Spierer, Tomasz Wlostowski (CERN, Geneva), Gregoire Hagmann (CERN, Geneva 23)

TUPOST023 **The CERN SPS Low level RF: The Cavity-Controller**
Author: Gregoire Hagmann (CERN, Geneva 23), Philippe Baudrenghien, Julien Egli, Arthur Spierer, Maciej Suminski, Tomasz Wlostowski (CERN, Geneva)

TUPOST024 **A New Beam Loading Compensation and Blowup Control System Using Multi-Harmonic Digital Feedback Loops in the CERN Proton Synchrotron Booster**
Author:
Author: Diego Barrientos, Simon Christopher Paul Albright, Maria Elena Angoletta, Michael Jaussi (CERN, Geneva 23), Alan Findlay, John Cornelis Molendijk (CERN, Geneva)

TUPOST025 **Beam Commissioning of the New Digital Low-Level RF System for CERN's AD**
Author: Maria Elena Angoletta, Simon Christopher Paul Albright (CERN, Meyrin), Alan Findlay, Michael Jaussi, Anthony Rey, Maciej Suminski (CERN, Geneva), Diego Barrientos (CERN, Geneva 23)

TUPOST027 **Machine Learning-Based LLRF Control of Superconducting Cavities**
Author: Jorge Alberto Diaz Cruz (SLAC, Menlo Park, California; UNM-ECE, Albuquerque), Salvador Sosa (ODU, Norfolk, Virginia), Sandra Biedron (UNM-ECE, Albuquerque)

TUPOST029 **Small Talk on AT**
Author: Pierre Schnizer, Johan Bengtsson, Waheedullah Sulaiman Khail (HZB, Berlin)

TUPOST030 **Status of Online Model Developments for BESSY II**
Author: Pierre Schnizer, Johan Bengtsson, Markus Ries, Waheedullah Sulaiman Khail (HZB, Berlin)

TUPOST031 **Online Optimization of the Transfer Line to SIS18 at GSI Using the Genetic Autotune Algorithm**
Author: Stephan Reimann (GSI, Darmstadt; IAP, Frankfurt am Main)

TUPOST032 **SLS 2.0, the Upgrade of the Swiss Light Source**
Author: Andreas Streun (PSI, Villigen PSI)

TUPOST033 **A Python Framework for High-level Applications in Accelerator Operations**
Author: Jan Chrin, Veysel Ercaglar, Thomas Schietinger (PSI, Villigen PSI)

TUPOST035 **BOLINA, a Suite for High Level Beam Optimization: First Experimental Results on the Adige Injector Beamline of the SPES Project**
Author: Valentina Martinelli, Luca Bellan, Damiano Bortolato, Michele Comunian, Alessio Galatà (INFN/LNL, Legnaro (PD))

TUPOST036 **Stabilization of Center Momentum Using Machine Learning in J-PARC Linac**
Author: Yong Liu (KEK/JAEA, Ibaraki-Ken), Kiyomi Seiya (Fermilab, Batavia, Illinois), Katsuhiro Moriya (JAEA/J-PARC, Tokai-Mura, Naka-Gun, Ibaraki-Ken), Michikazu Kinsho, Akihiko Miura, Hidetomo Oguri (JAEA/J-PARC, Tokai-mura), Ersin Cicek, Zhigao Fang, Yuji Fukui, Kenta Futatsukawa, Tomoaki Miyao (KEK, Ibaraki), Hideaki Hotchi, Masashi Otani (KEK, Tokai, Ibaraki)

TUPOST037 **Reconstruction of Transverse Phase Space From Transverse Feedback Data for Real Time Extraction of Vital LHC Machine Parameters**
Author: Gerd Kotzian, Preben Sandve Solvang, Daniel Valuch (CERN, Geneva 23), Martin Einar Soderen (CERN, Geneva), Viera Stopjakova (Slovak University of Technology (STU), Bratislava)

TUPOST039 **Automated Scientific Metadata Recording and Viewing During Experiments at Synchrotron Research Facilities**
Author: Daphne van Dijken, Mikel Eguiraun, Vincent Hardion, Magnus Klingberg (MAX IV Laboratory, Lund)

TUPOST040 **Automated Intensity Optimisation Using Reinforcement Learning at LEIR**
Author: Nico Madysa, Reyes Alemany-Fernandez, Verena Kain, Francesco Maria Velotti (CERN, Geneva), Nicolo Biancacci, Brennan Goddard (CERN, Meyrin)

TUPOST041 **Experience With Computer Aided Optimizations in LINAC4 at CERN**
Author: Piotr Krzysztof Skowronski (CERN, Geneva), Matthew Alexander Fraser (CERN, Geneva 23), Isabella Vojskovic (CERN, Meyrin)

TUPOST042 **Towards the Automatic Setup of Longitudinal Emittance Blow-Up in the CERN SPS**
Author: Niky Bruchon, Giulia Papotti (CERN, Geneva 23), Nico Madysa (CERN, Geneva), Charilaos Zisou (CERN, Geneva 23; AUTH, Thessaloniki), Ivan Karpov, Danilo Quartullo (CERN, Meyrin)

TUPOST043 **A Novel Method for Detecting Unidentified Falling Object Loss Patterns in the LHC**
Author: Loic Coyle, Frederic Blanc, Tatiana Pieloni (EPFL, Lausanne), Daniele Mirarchi (CERN, Geneva), Anton Lechner, Matteo Solfaroli Camillocci, Jorg Wenninger (CERN, Meyrin)

TUPOST044 **Fortune Telling or Physics Prediction? Deep Learning for On-Line Kicker Temperature Forecasting**
Author: Francesco Maria Velotti, Michael John Barnes, Brennan Goddard, Irene Revuelta (CERN, Meyrin)

TUPOST045 **Overview of the Machine Learning and Numerical Optimiser Applications on Beam Transfer Systems for LHC and Its Injectors**
Author: Francesco Maria Velotti, Michael John Barnes, Etienne Carlier, Matthew Alexander Fraser, Brennan Goddard, Nicolas Magnin, Rebecca Ramjiawan, Elisabeth Renner (CERN, Meyrin), Yann Dutheil (CERN, Geneva), Pieter Van Trappen (CERN, Geneva 23), Elias Waagaard (Uppsala University, Uppsala)

TUPOST046 **Machine Learning Applied for the Calibration of the Hard X-Ray Single-Shot Spectrometer at the European XFEL**
Author: Christian Grech, Marc Walter Guetg (DESY, Hamburg), Gianluca Geloni (EuXFEL, Schenefeld)

TUPOST047 **Novel Approaches for Classification and Forecasting of Time Series in Particle Accelerators**
Author: Sichen Li, Andreas Adelmann, Jochem Snuverink (PSI, Villigen PSI)

TUPOST048 **Development of a Virtual Diagnostic for Estimating Key Beam Descriptors**
Author: Kathryn Baker, Ivan Finch, Scott Robert Lawrie, Alex Saoulis (STFC/RAL/ISIS, Chilton, Didcot, Oxon), Susmita Basak, Jaehoon Cha, Jeyan Thiyagalingam (STFC/RAL/SCD, Didcot)

TUPOST049 **Simulation Study for an Inverse Designed Narrowband THz Radiator for Ultrarelativistic Electrons**
Author: Gyanendra Yadav (The University of Liverpool, Liverpool), Carsten Peter Welsch (Cockcroft Institute, Warrington, Cheshire; The University of Liverpool, Liverpool), Urs Haeusler, Adrian Kirchner (FAU, Erlangen), Benedikt Hermann, Rasmus Ischebeck (PSI, Villigen PSI), Peter Hommelhoff (University of Erlangen-Nuremberg, Erlangen), Thomas Feurer (Universität Bern, Bern)

TUPOST050 **Liverpool Centre for Doctoral Training for Innovation in Data Intensive Science**
Author: Carsten Peter Welsch (Cockcroft Institute, Warrington, Cheshire; The University of Liverpool, Liverpool)

TUPOST051 **Using Data Intensive Science for Accelerator Optimization**
Author: Carsten Peter Welsch (Cockcroft Institute, Warrington, Cheshire; The University of Liverpool, Liverpool)

TUPOST053 **FRIB Front End Control Using Machine Learning**
Author: Kilean Hwang, Kei Fukushima, Tomofumi Maruta, Samuel Nash, Peter Ostroumov, Alexander Plastun, Tong Zhang, Qiang Zhao (FRIB, East Lansing, Michigan)

TUPOST054 **Experiment of Bayesian Optimization for Trajectory Alignment at Low Energy RHIC Electron Cooler**
Author: Yuan Gao, Kevin A. Brown, Xiaofeng Gu, John Morris, Sergei Seletskiy (BNL, Upton, New York), James Arthur Crittenden, Georg H. Hoffstaetter, Weijian Lin (Cornell University (CLASSE), Ithaca, New York)

TUPOST055 **Toward Machine Learning-Based Adaptive Control and Global Feedback for Compact Accelerators**
Author: Frederick (Eric) William Cropp V, Pietro Musumeci (UCLA, Los Angeles), Alexander Scheinker (LANL, Los Alamos, New Mexico), Daniele Filippetto, Antonio Gilardi, Sergio Paiagua, Dan Wang (LBNL, Berkeley, California)

TUPOST056 **Multi-Objective Bayesian Optimization at SLAC MeV-UED**

Author: Fuhao Ji, Auralee Edelen, Robert Joel England, Patrick Kramer, Duan Luo, Christopher Mayes, Michael Minitti, Sara Ayoub Miskovich, Mianzhen Mo, Alexander Reid, Ryan Roussel, Xiaozhe Shen, Xijie Wang, Stephen Weathersby (SLAC, Menlo Park, California)

TUPOST058 **Badger: The Missing Optimizer in ACR**

Author: Zhe Zhang, Auralee Edelen, Jacqueline Garrahan, Christopher Mayes, Sara Ayoub Miskovich, Daniel Ratner, Ryan Roussel, Jane Shtalenkova (SLAC, Menlo Park, California)

TUPOST059 **Beam Emittance Measurements With Adaptive Quadrupole Scans**

Author: Sara Ayoub Miskovich, Auralee Edelen, Christopher Mayes (SLAC, Menlo Park, California)

TUPOST061 **In-Situ Characterization and Optimization of Accelerators Exhibiting Hysteresis Using Differentiable Physics Models**

Author: Ryan Roussel, Auralee Edelen, Sara Ayoub Miskovich, Daniel Ratner (SLAC, Menlo Park, California), Louis Emery (ANL, Lemont, Illinois), Juan Pablo Gonzalez Aguilera (Enrico Fermi Institute, Chicago, Illinois), Kabir Dubey, Nikita Kuklev (University of Chicago, Chicago, Illinois)

Jun 14, 2022 16:00 - 18:00 Poster Session Poster Area Padthai

TUPOPT - Poster Session - Padthai

TUPOPT001 **Progress and Status of Full Start to End Simulations for the FLASH2020+ Upgrade**

Author: Pardis Niknejadi, Sven Ackermann, Philipp Amstutz, Martin Dohlus, Tino Lang, Georgia Paraskaki, Dmitrii Samoilenko, Lucas Schaper, Mathias Vogt (DESY, Hamburg), Francesca Curbis, Mihai Alexandru Pop (MAX IV Laboratory, Lund), Eugenio Ferrari, Sven Reiche (PSI, Villigen PSI), Wolfgang Carl Albert Hillert, Fabian Pannek (University of Hamburg, Hamburg)

TUPOPT003 **Towards a New Coherent Lightsource: Progress of the FLASH2020+ Project**

Author: Lucas Schaper, Philipp Amstutz, Nicoleta Baboi, Karolin Baev, Martin Beye, Günter Brenner, Florian Christie, Christopher Gerth, Ingmar Hartl, Katja Honkavaara, Bastian Manschwetus, Jochen Mueller-Dieckmann, Rui Pan, Elke Plönjes-Palm, Olaf Rasmussen, Juliane Roensch, Evgeny Schneidmiller, Siegfried Schreiber, Kai I. Tiedtke, Markus Tischer, Sven Toleikis, Mathias Vogt, Lutz Winkelmann, Mikhail Yurkov, Johann Zemella (DESY, Hamburg), Enrico Allaria (Elettra-Sincrotrone Trieste S.C.p.A., Basovizza)

TUPOPT004 **Two-Color Hard X-Ray Free-Electron Laser at PAL-XFEL**

Author: Chi Hyun Shim, Heung-Sik Kang, Jun Ho Ko (PAL, Pohang)

TUPOPT005 **Status of the Superconducting Soft X-Ray Free-Electron Laser User Facility FLASH**

Author: Mathias Vogt, Christopher Gerth, Katja Honkavaara, Marion Kuhlmann, Juliane Roensch-Schulenburg, Lucas Schaper, Siegfried Schreiber, Rolf Treusch, Johann Zemella (DESY, Hamburg)

TUPOPT006 **The New FLASH1 Beamline for the FLASH2020+ Project**
Author: Mathias Vogt, Johann Zemella (DESY, Hamburg)

TUPOPT008 **An Overview of the T20 Beamline for the LUXE Experiment at the EUXFEL**
Author: Stuart Derek Walker (DESY, Hamburg)

TUPOPT010 **Virtual Commissioning of the European XFEL for Advanced User Experiments at Photon Energies Beyond 25 keV Using Low-Emittance Electron Beams**
Author: Ye Chen, Frank Brinker, Winfried Decking, Matthias Scholz, Lutz Winkelmann, Zihan Zhu (DESY, Hamburg)

TUPOPT011 **Start To End Simulation Study For Oscillator-Amplifier Free-Electron Laser**
Author: Hao Sun (SINAP, Shanghai), Zihan Zhu (DESY, Hamburg; SINAP, Shanghai), Chao Feng, Bo Liu (SARI-CAS, Pudong, Shanghai)

TUPOPT012 **Inhibition of Current-Spike Formation Based on Longitudinal Phase Space Manipulation for High-Repetition-Rate X-Ray**
Author: Zihan Zhu (SINAP, Shanghai)

TUPOPT013 **The Free-electron Laser Online Optimization Method with Twin Delayed Deep Deterministic Policy Gradient**
Author: Meng Cai, Lingjun Tu, Zihan Zhu (SINAP, Shanghai), Duan Gu (SARI-CAS, Pudong, Shanghai), Chao Feng, Zhentang Zhao (SINAP, Shanghai; SSRF, Shanghai), Kaiqing Zhang (SSRF, Shanghai)

TUPOPT014 **The Status of the SASE3 Variable Polarization Project at the European XFEL**
Author: Suren Karabekyan, Suren Abeghyan, Majid Bagha-Shanjani, Sara Casalbuoni, Wolfgang Freund, Gianluca Geloni, Jan Grünert, Steffen Hauf, Christian Holz, Daniele La Civita, Joakim Laksman, Denys Mamchyk, Marc Planas, Florian Preisskorn, Svitozar Serkez, Harald Sinn, Mark Wuenschel, Mikhail Yakopov, Christopher Youngman (EuXFEL, Schenefeld), Philipp Altmann, Andreas Block, Winfried Decking, Lars Froehlich, Olaf Hensler, Tobias Ladwig, Dennis Lenz, Dirk Lipka, Ronny Mattusch, Nils Mildner, Evgueni Negodin, Johannes Prenting, Fabian Saretzki, Markus Schloesser, Frank Schmidt-Foehre, Evgeny Schneidmiller, Matthias Scholz, Daniel Thoden, Thomas Wamsat, Tim Wilksen, Torsten Wohlenberg, Mikhail Yurkov (DESY, Hamburg), Uwe Englisch (EuXFEL, Hamburg), Johannes Bahrdt (HZB, Berlin), Yuhui Li (IHEP,), Dong Eon Kim (PAL, Pohang), Mark Bruegger, Marco Calvi, Steffen Danner, Romain Ganter, Lars Huber, Andreas Keller, Christoph Kittel, Xiaoyang Liang, Sven Reiche, Marcus Schmidt, Thomas Schmidt, Kai Zhang (PSI, Villigen PSI)

TUPOPT015 **Optical Simulation for Performance Prediction of X-Ray Optical Delay Line at European XFEL**
Author: Marziyeh Tavakkoly (EuXFEL, Schenefeld; University of Hamburg, Hamburg), Torsten Wohlenberg (DESY, Hamburg), Jan Grünert, Andreas Koch, Daniele La Civita, Mikako Makita, Michael Meyer, Marc Planas, Svitozar Serkez, Harald Sinn, Maurizio Vannoni (EuXFEL, Schenefeld)

TUPOPT016 **Status of the THz@PITZ Project : the Proof-of-Principle Experiment on a THz SASE FEL at the PITZ Facility**
Author: Tobias Weilbach, Prach Boonpornprasert, Georgi Zhivkov Georgiev, Gerald Koss, Mikhail Krasilnikov, Xiangkun Li, Anusorn Lueangaramwong, Frieder Mueller, Anne Oppelt, Sebastian Philipp, Frank Stephan (DESY Zeuthen, Zeuthen)

TUPOPT017 **Start-to-end Simulations for Bunch Compressor and THz SASE FEL at PITZ**

Author: Anusorn Lueangaramwong, Prach Boonpornprasert, Mikhail Krasilnikov, Xiangkun Li, Frank Stephan (DESY Zeuthen, Zeuthen)

TUPOPT018 **Future Upgrade Strategy of the Fermi Seeded FEL Facility**

Author: Luca Giannessi, Enrico Allaria, Laura Badano, Filippo Bencivenga, Carlo Callegari, Flavio Capotondi, Davide Castronovo, Paolo Cinquegrana, Miltcho B. Danailov, Giovanni De Ninno, Paolo Delgiusto, Alexander Demidovich, Simone Di Mitri, Bruno Diviacco, William M. Fawley, Mario Ferianis, Giulio Gaio, Federico Gelmetti, Gabor Kurdi, Marco Lonza, Marco Malvestuto, Michele Manfredda, Claudio Masciovecchio, Ivaylo Nikolov, Giuseppe Penco, Kevin C Prince, Emiliano Principi, Primoz Rebernik Ribic, Claudio Scafuri, Nuaman Shafqat, Paolo Sigalotti, Alberto Simoncig, Filippo Sottocorona, Simone Spampinati, Carlo Spezzani, Luca Sturari, Mauro Trovo, Marco Veronese, Roberto Visintini, Marco Zangrando (Elettra-Sincrotrone Trieste S.C.p.A., Basovizza), Marcello Coreno (CNR-ISM, Trieste; Elettra-Sincrotrone Trieste S.C.p.A., Basovizza), Gregory Penn (LBNL, Berkeley, California), Takashi Tanaka (RIKEN SPring-8 Center, Hyogo), Giovanni Perosa (Università degli Studi di Trieste, Trieste)

TUPOPT019 **FERMI FEL-1 Upgrade to Echo Enabled Harmonic Generation**

Author: Carlo Spezzani, Enrico Allaria, Laura Badano, Davide Castronovo, Paolo Cinquegrana, Miltcho B. Danailov, Raffaele De Monte, Giovanni De Ninno, Paolo Delgiusto, Alexander Demidovich, Simone Di Mitri, Bruno Diviacco, Mario Ferianis, Giulio Gaio, Federico Gelmetti, Luca Giannessi, Gabor Kurdi, Marco Lonza, Claudio Masciovecchio, Ivaylo Nikolov, Giuseppe Penco, Primoz Rebernik Ribic, Claudio Scafuri, Nuaman Shafqat, Paolo Sigalotti, Filippo Sottocorona, Simone Spampinati, Luca Sturari, Mauro Trovo, Marco Veronese, Roberto Visintini (Elettra-Sincrotrone Trieste S.C.p.A., Basovizza), Giovanni Perosa (Università degli Studi di Trieste, Trieste)

TUPOPT021 **Proposal of the Fresh-Slice Based High-Power X-Ray FEL for the SBP Line at the SXFEL-UF**

Author: Tao Liu, Haixiao Deng, Chao Feng, Bo Liu, Zheng Qi (SARI-CAS, Pudong, Shanghai), Si Chen, Kaiqing Zhang (SSRF, Shanghai)

TUPOPT022 **Multi-Color FEL Generation Through a Chirped Electron Beam Bunch Train**

Author: Zheng Qi, Haixiao Deng, Chao Feng, Bo Liu (SARI-CAS, Pudong, Shanghai)

TUPOPT023 **Undulator Tapering Studies of an Echo-Enabled Harmonic Generation Based Free-Electron Laser**

Author: Fabian Pannek, Wolfgang Carl Albert Hillert (University of Hamburg, Hamburg), Sven Ackermann, Eugenio Ferrari, Lucas Schaper (DESY, Hamburg)

TUPOPT024 **Recent Developments at SOLARIS National Synchrotron Research Centre**

Author: Adriana Izabela Wawrzyniak, Piotr Andryszczak, Grzegorz Cios, Krzysztof Gula, Grzegorz Wawrzyniec Kowalski, Andrzej Marek Marendziak, Alexey Maximenko, Roman Panas, Tomasz Sobol, Mateusz Szczepaniak, Jaroslaw Wiechecki, Mateusz Wisniowski, Marcin Zając (NSRC SOLARIS, Krakow), Alessandro Curcio (CLPU, Villamayor), Henning Lichtenberg (Hochschule Niederrhein University of Applied Sciences, Krefeld)

TUPOPT025 **Concept of Electron Beam Diagnostics for POLFEL**

Author: Adriana Izabela Wawrzyniak, Grzegorz Wawrzyniec Kowalski, Andrzej Marek Marendziak, Roman Panas (NSRC SOLARIS, Krakow), Alessandro Curcio (CLPU, Villamayor), Kacper Lasocha (Jagiellonian University, Krakow), Pawel Jerzy Czuma, Maciej Krakowiak, Pawel Krawczyk, Roch Kwiatkowski, Slawomir Mianowski, Robert Nietubyc, Marcin Staszczak, Jaroslaw Szewinski, Marcin Terka, Marek Wójtowicz (NCBJ, Swierk/Otwock)

TUPOPT026 **Design and Status of Fast Orbit Feedback System at SOLARIS**

Author: Grzegorz Wawrzyniec Kowalski, Krzysztof Gula, Roman Panas, Adriana Izabela Wawrzyniak, Jaroslaw Wiechecki (NSRC SOLARIS, Krakow)

Author?

TUPOPT027 **Numerical Simulation of a Superradiant THz Source at the PITZ Facility**

Author: Natthawut Chaisueb (Chiang Mai University, Chiang Mai), Sakhorn Rimjaem (Chiang Mai University, Chiang Mai; ThEP Center, Bangkok), Prach Boonpornprasert, Mikhail Krasilnikov, Xiangkun Li, Anusorn Lueangaramwong (DESY Zeuthen, Zeuthen)

TUPOPT028 **Generation of THz Undulator Radiation Based on Super-Radiant Technique at Chiang Mai University**

Author: Ekkachai Kongmon (IST, Chiang Mai), Natthawut Chaisueb (Chiang Mai University, Chiang Mai), Sakhorn Rimjaem (Chiang Mai University, Chiang Mai; ThEP Center, Bangkok)

TUPOPT029 **Infrared Free-Electron Laser Project in Thailand**

Author: Sakhorn Rimjaem, Natthawut Chaisueb, Phanthip Jaikaew, Nopadol Kangrang, Pitchayapak Kitisri, Kanlayaporn Kongmali, Ekkachai Kongmon, Siriwan Pakluea, Jatuporn Saisut, Supasin Sukara, Kittipong Techakaew, Chitrlada Thongbai (Chiang Mai University, Chiang Mai), Monchai Jitvisate (Suranaree University of Technology, Nakhon Ratchasima), Michael W. Rhodes (ThEP Center, Bangkok)

TUPOPT030 **Design and Simulation of the MIR-FEL Generation System at Chiang Mai University**

Author: Supasin Sukara, Sakhorn Rimjaem (Chiang Mai University, Chiang Mai), Hideaki Ohgaki (Kyoto University, Kyoto)

TUPOPT032 **Single Pass High Efficiency THz FEL**

Author: Andrew Charles Fisher, Maximilian Patrick Lenz, Pietro Musumeci, Alexander Ody, Youna Park (UCLA, Los Angeles), Alex Murokh (RadiaBeam, Marina del Rey, California), Ronald Agustsson, Tara Campese (RadiaBeam, Santa Monica, California)

TUPOPT033 **Electro-Optic Sampling Based Characterization of Broad-Band High Efficiency THz-FEL**

Author: Maximilian Patrick Lenz, Andrew Charles Fisher, Pietro Musumeci, Alexander Ody, Youna Park (UCLA, Los Angeles)

TUPOPT034 **Modelling of X-Ray Volume Excitation of the XLO Gain Medium**

Author: Pratik Manwani, Nathan Majernik, Brian Naranjo, James Rosenzweig (UCLA, Los Angeles, California), Eric Christophe Galtier, Aliaksei Halavanau, Claudio Pellegrini (SLAC, Menlo Park, California)

TUPOPT035 **Introduction of Westwood Linear Accelerator Test Facility in University of California Los Angeles**

Author: Yusuke Sakai, Gerard Andonian, Atsushi Fukasawa, Gerard Emile Lawler, Nathan Majernik, Pratik Manwani, Brian Naranjo, James Rosenzweig, Oliver Williams (UCLA, Los Angeles, California), Obed Camacho (UCLA, Los Angeles)

TUPOPT036 **Two and Multiple Bunches with the LCLS Copper Linac**

Author: Franz-Josef Decker, William Colocho, Aliaksei Halavanau, Alberto Andrea Lutman, James MacArthur, Gabriel Marcus, Rachel Anne Margraf, John Charles Sheppard, Joshua Turner, Sharon Vetter (SLAC, Menlo Park, California)

TUPOPT037 **LCLS Multi-Bunch Improvement Plan: First Results**

Author: Aliaksei Halavanau, Tony Beukers, Franz-Josef Decker, Alev Ibrahimov, Erik Nyls Jongewaard, Anatoly Krasnykh, Agostino Marinelli, Tor Raubenheimer, Agustin Romero, Ann Sy (SLAC, Menlo Park, California)

TUPOPT038 **FAST-GREENS: A High Efficiency Free Electron Laser Driven by Superconducting RFAccelerator**

Author: Pietro Musumeci (UCLA, Los Angeles, California), William Berg, Alex Lumpkin, Alexander Zholents (ANL, Lemont, Illinois), Daniel Robert Broemmelsiek, Sergei Nagaitsev, Giulio Stancari, Alexander Valishev (Fermilab, Batavia, Illinois), Alex Murokh (RadiaBeam, Marina del Rey, California), Ronald Agustsson, Tara Campese (RadiaBeam, Santa Monica, California), David Leslie Bruhwiler, Jonathan Edelen, Christopher Hall (RadiaSoft LLC, Boulder, Colorado), Paul Elliot Denham, Andrew Charles Fisher, Youna Park (UCLA, Los Angeles), Loïc Amoudry (Université Paris-Saclay, CNRS/IN2P3, IJCLab, Orsay)

TUPOPT039 **Characterization of Diamond with Buried Boron-doped Layer developed for Q-switching an X-ray Optical Cavity**

Author: Rachel Anne Margraf, Aliaksei Halavanau, Jacek Krzywinski, James MacArthur, Gabriel Marcus, May Ling Ng, Takahiro Sato, Diling Zhu (SLAC, Menlo Park, California), Paresh Pradhan (ANL, Lemont, Illinois), Sung-Kwan Mo (LBNL, Berkeley, California), Yong Zhong (LBNL, Berkeley, California; Stanford University, Stanford, California), Aymeric Robert (MAX IV Laboratory, Lund; SLAC, Menlo Park, California), Zhirong Huang, River Robles (SLAC, Menlo Park, California; Stanford University, Stanford, California), Feng Ke (Stanford University, Stanford, California), María Dolores Ynsa (UAM, Madrid)

TUPOPT041 **Performance Optimization of High Repetition Rate Injector with Wakefield Structure**

Author: Zhen Zhang (SLAC, Menlo Park, California)

TUPOPT042 **A Ring Based Advanced Photon Source at Jefferson Lab**

Author: Yuhong Zhang, Stephen Vincent Benson, Jiquan Guo, Andrew Hutton, Gunn-Tae Park, Robert Rimmer (JLab, Newport News, Virginia), Fanglei Lin, Vasiliy Morozov (ORNL RAD, Oak Ridge, Tennessee)

TUPOPT044 **High-Power Attosecond Pulses via Cascaded Amplification**

Author: Paris Lee Franz, Zhaoheng Guo (Stanford University, Stanford, California), Dorian Keith Bohler, David Cesar, Xinxin Cheng, James Patrick Cryan, Taran Driver, Joseph Patrick Duris, Andrei Kamalov, Agostino Marinelli, Razib Obaid, Nicholas Sigmund Sudar, Anna Li Wang, Zhen Zhang (SLAC, Menlo Park, California), Siqi Li, River Robles (SLAC, Menlo Park, California; Stanford University, Stanford, California)

TUPOPT045 **Development of Sub-Femtosecond Pump/probe Techniques With X-Ray Free-Electron Lasers**

Author: Zhaoheng Guo, Paris Lee Franz (Stanford University, Stanford, California), Dorian Keith Bohler, David Cesar, Xinxin Cheng, James Patrick Cryan, Taran Driver, Joseph Patrick Duris, Andrei Kamalov, Kirk Larsen, Agostino Marinelli, Razib Obaid, Jordan O'Neal, Nicholas Sigmund Sudar, Anna Li Wang, Zhen Zhang (SLAC, Menlo Park, California), Zhirong Huang, Siqi Li, River Robles (SLAC, Menlo Park, California; Stanford University, Stanford, California)

TUPOPT046 **Electron Transport for the LCLS-II-HE Low Emittance Injector**
Author: Yuri Nosochkov, Chris Adolphsen, Robert Coy, Christopher Mayes, Tor Raubenheimer, Mark Woodley (SLAC, Menlo Park, California)

TUPOPT047 **Progress Report on Population Inversion X-Ray Laser Oscillator at LCLS**
Author: Aliaksei Halavanau, Uwe Bergmann, Claudio Pellegrini (SLAC, Menlo Park, California), Andrei Benediktovitch (DESY, Hamburg), Spela Krusic (JSI, Ljubljana), Nina Rohringer (Max Planck Institute for the Physics of Complex Systems, Dresden), River Robles (Stanford University, Stanford, California), Nathan Majernik, Pratik Manwani, James Rosenzweig (UCLA, Los Angeles, California), Ryan Ash, Noah Welke (UW-Madison/PD, Madison, Wisconsin)

TUPOPT048 **bERLinPro Becomes Sealab: Status and Perspective of the Energy Recovery Linac at HZB**
Author: Axel Neumann, Benat Alberdi-Esuain, Thomas Birke, Pablo Echevarria, Dan Eichel, Fjodor Falkenstern, Roland Fleischhauer, Andre Frahm, Frank Goebel, Andreas Heugel, Falk Hoffmann, Holger Huck, Sascha Klauke, Guido Klemz, Jörg Kolbe, Julius Kuehn, Bettina Christa Kuske, Jens Kuszynski, Sonal Mistry, Nina Ohm, Henry Ploetz, Stefan Rotterdam, Oliver Schappeit, Guenter Schindhelm, Christoph Schröder, Michael Schuster, Hannes Stein, Ervis Suljoti, Yegor Tamashevich, Mario Tannert, Jan Ullrich, Andriy Ushakov, Jens Voelker, Chen Wang (HZB, Berlin), Thorsten Kamps (HZB, Berlin; HU Berlin, Berlin)

TUPOPT049 **Multi-Turn Energy Recovery Operation at S-DALINAC**
Author: Felix Schließmann, Michaela Arnold, Manuel Dutine, Marco Fischer, Ruben Grewe, Lars Erik Juergensen, Norbert Pietralla, Manuel Steinhorst, Lennart Stobbe, Simon Weih (TU Darmstadt, Darmstadt)

TUPOPT050 **Investigation of Polarization Dependent Thomson Scattering in an Energy-Recovering Linear Accelerator on the Example of Mesa**
Author: Christoph Lukas Lorey, Atoosa Meseck (KPH, Mainz)

TUPOPT051 **Reconstruction and Beam-Transport Study of the cERL Dump Line for High-Power IR-FEL Operation**
Author: Norio Nakamura, Kentaro Harada, Nao Higashi, Ryukou Kato, Shinya Nagahashi, Kazuyuki Nigorikawa, Takashi Nogami, Takashi Obina, Hidenori Sagehashi, Hiroshi Sakai, Miho Shimada, Ryota Takai, Olga Alexandrovna Tanaka, Yasunori Tanimoto, Takashi Uchiyama, Akira Ueda (KEK, Ibaraki)

TUPOPT052 **Proposal for Non-Destructive Electron Beam Diagnostic With Laser-Compton Backscattering at the S-Dalinac**
Author: Maximilian Georg Meier, Michaela Arnold, Joachim Enders, Norbert Pietralla (TU Darmstadt, Darmstadt)

TUPOPT053 **Study of Bunch Length Measurement by Forward Coherent Smith-Purcell Radiation**
Author: Hiroki Yamada, Hiroyuki Hama, Fujio Hinode, Ken Kanomata, Shigeru Kashiwagi, Sadao Miura, Toshiya Muto, Ikurou Nagasawa, Ken-ichi Nanbu, Hirotoshi Saito, Kotaro Shibata, Ken Takahashi (Tohoku University, Sendai)

TUPOPT054 **Generation of Coherent THz Transition Radiation for Time Domain Spectroscopy at the PBP-CMU Electron Linac Laboratory**
Author: Siriwan Pakluea (Chiang Mai University, Chiang Mai), Sakhorn Rimjaem, Jatuporn Saisut, Chitrlada Thongbai (Chiang Mai University, Chiang Mai; ThEP Center, Bangkok), Monchai Jitvisate (Suranaree University of Technology, Nakhon Ratchasima)

TUPOPT055 **Isolated Attosecond X-ray Pulses from Thomson Scattering by Microbunched Electrons**
Author: Brian Schaap, Tim Christiaan Hendrik de Raadt, Jom Luiten (TUE, Eindhoven)

TUPOPT056 **Overview and Developments of Instrumentation at the BioMAX Beamline at MAX IV**
Author: Ishkhan Gorgisyan, Oskar Aurelius, Paul James Bell, Mikel Eguiraun, Aureo Freitas, Ana Gonzalez, Julio Lidon-Simon, Isak Lindhé, Mirko Milas, Jie Nan, Carla Takahashi, Hamed Tarawneh, Thomas Ursby (MAX IV Laboratory, Lund)

TUPOPT057 **Using Surrogate Models to Assist Accelerator Tuning at ISIS**
Author: Alex Saoulis, Kathryn Baker, Hayley Victoria Cavanagh, Robert Williamson (STFC/RAL/ISIS, Chilton, Didcot, Oxon), Susmita Basak, Jaehoon Cha, Jeyan Thiyagalingam (STFC/RAL/SCD, Didcot)

TUPOPT058 **A Machine Learning Approach to Electron Orbit Control at the 1.5-GeV Synchrotron Light Source DELTA**
Author: Detlev Schirmer (DELTA, Dortmund)

TUPOPT059 **Machine Learning Methods for Chromaticity Control at the 1.5 GeV Synchrotron Light Source DELTA**
Author: Detlev Schirmer, Andre Althaus, Torben Schüngel (DELTA, Dortmund)

TUPOPT060 **EPICS-Based Telegram Integration for Control and Alarm Handling at TEX Facility**
Author: Stefano Pioli, Daniele Moriggi (LNF-INFN, Frascati), Fabio Cardelli, Paolo Ciuffetti, Claudio Di Giulio (INFN/LNF, Frascati)

TUPOPT061 **Status and Commissioning of the First X-Band RF Source of the TEX Facility**
Author: Fabio Cardelli, David Alesini, Marco Bellaveglia, Simone Bini, Matteo Ceccarelli, Claudio Di Giulio, Antonio Falone, Giovanni Franzini, Alessandro Gallo, Luca Piersanti, Lucia Sabbatini (INFN/LNF, Frascati), Bruno Buonomo, Gaetano Catuscelli, Riccardo Ceccarelli, Alberto Cecchinelli, Renato Clementi, Enrico Di Pasquale, Andrea Liedl, Daniele Moriggi, Graziano Piermarini, Stefano Pioli, Sergio Quaglia, Luis Antonio Rossi, Michele Scampati, Giorgio Scarselletta, Serena Strabioli, Simone Tocci, Raffaele Zarlenga (LNF-INFN, Frascati)

TUPOPT062 **A Data-Driven Anomaly Detection on SRF Cavities at the European XFEL**
Author: Antonin Sulc, Annika Eichler, Tim Wilksen (DESY, Hamburg)

TUPOPT063 **Vsystem to EPICS Control System Transition at the ISIS Accelerators**
Author: Ivan Finch, Basil Riyad Aljamal, Kathryn Baker, Richard Brodie, Juan Luis Fernandez-Hernando, Gareth Howells, Mateusz Leputa, Sarah Ann Medley, Alex Saoulis (STFC/RAL/ISIS, Chilton, Didcot, Oxon), Ajit Kurup (Imperial College of Science and Technology, London)

TUPOPT064 **Online Optimization of NSLS-II Dynamic Aperture and Injection Transient**
Author: Xi Yang, Belkacem Bacha, Scott Buda, Christopher Danneil, Anton Anatolievich Derbenev, Douglas Durfee, Kiman Ha, Yoshiteru Hidaka, Yong Hu, Yongjun Li, Danny Padrazo Jr, Fabien Plassard, Timur Shaftan, Victor Smaluk, Yuke Tian, Guimei Wang, Li Hua Yu (BNL, Upton, New York)

TUPOPT065 **Dispersion-Free Steering Beam Based Alignment at SwissFEL**

Author: Eugenio Ferrari, Marco Calvi, Romain Ganter, Eduard Prat, Sven Reiche, Thomas Schietinger (PSI, Villigen PSI), Christoph Kittel (PSI, Villigen PSI; University of Malta, Msida)

TUPOPT066 **KEK LUCX Facility Laser-to-RF&RF-to-RF Stability Study and Optimization**

Author: Konstantin Popov (Sokendai, Ibaraki), Alexander Aryshev, Nobuhiro Terunuma, Junji Urakawa (KEK, Ibaraki)

TUPOPT067 **Development of a Trigger Distribution System Based on MicroTCA.4**

Author: Hirokazu Maesaka, Takahiro Inagaki (RIKEN SPring-8 Center, Hyogo; JASRI, Hyogo), Naoyasu Hosoda, Eito Iwai, Takashi Ohshima (JASRI, Hyogo; RIKEN SPring-8 Center, Hyogo)

TUPOPT068 **Transverse and Longitudinal Modulation of Photoinjection Pulses at FLUTE**

Author: Matthias Nabinger, Michael Johannes Nasse (KIT, Eggenstein-Leopoldshafen), Anke-Susanne Mueller, Carl Sax, Jens Schaefer, Christina Widmann, Chenran Xu (KIT, Karlsruhe)

TUPOPT069 **Preparation and Characterization of BTO-BFO Multiferroic Ceramics as Electrical Controllable Fast Phase Shifting Component**

Author: Norayr Williams Martirosyan, Khachatur Kirakosyan, Vahe Sahakyan, Artsrun Sargsyan (CANDLE SRI, Yerevan), Armen Grigoryan (CANDLE SRI, Yerevan; YSU, Yerevan), Gegham Karoyan, Ruzanna Hayrapet Khazaryan, Mariam Manvel Mkrtchian, Tigran Vandunts (NPUA, Yerevan)

TUPOPT070 **Surrogate Modelling of the FLUTE Low-Energy Section**

Author: Chenran Xu, Erik Bründermann, Anke-Susanne Mueller, Andrea Santamaria Garcia, Jens Schaefer (KIT, Karlsruhe)

Jun 14, 2022 16:00 - 18:00 Poster Session Poster Area Tomyam Kung

TUPOTK - Poster Session - Tomyam Kung

TUPOTK001 **The 650 MHz Low Beta Cryomodule for the PIP-II Linear Accelerator**

Author: Nicolas Bazin, Stéphane Berry, Gabriel Maitre, Claire Simon (CEA-DRF-IRFU,), Robin Cubizolles, Mickaël Lacroix (CEA-IRFU, Gif-sur-Yvette), Saravan Kumar Chandrasekaran, Vincent Roger (Fermilab, Batavia, Illinois)

TUPOTK002 **Results of the RF Power Tests of the ESS Cryomodules Tested at CEA**

Author: Olivier Piquet, Stéphane Berry, Adrien Bouygues, Enrico Cenni, Guillaume Devanz, Catherine Madec, Christophe Mayri, Patrick Sahuquet (CEA-DRF-IRFU,), Christian Arcambal, Quentin Bertrand, Pierre Bosland, Thibault Hamelin (CEA-IRFU, Gif-sur-Yvette), Paolo Pierini (ESS, Lund), Daniele Sertore (INFN/LASA, Segrate (MI)), Mike Ellis (STFC/DL/ASTeC, Daresbury, Warrington, Cheshire)

TUPOTK003 **High Power RF Conditioning of the ESS RFQ**

Author: Olivier Piquet, Anne-Catherine Chauveau, Pierrick Hamel (CEA-IRFU, Gif-sur-Yvette), Matthieu Baudrier, Michel Jean Desmons (CEA-DRF-IRFU,), Bryan Jones, Daniel Noll, Alejandro Garcia Sosa, Emmanouil Trachanas, Rihua Zeng (ESS, Lund)

TUPOTK004 **Time Resolved Field Emission Detection During ESS Cryomodule Tests**

Author: Enrico Cenni, Guillaume Devanz, Olivier Piquet (CEA-IRFU, Gif-sur-Yvette), Matthieu Baudrier, Luc Maurice (CEA-DRF-IRFU)

TUPOTK005 **Mitigation of Parasitic Losses in the Quadrupole Resonator Enabling Direct Measurements of Low Residual Resistances of SRF Samples**

Author: Sebastian Keckert, Raphael Kleindienst, Felix Kramer, Oliver Kugeler, Dmitry Tikhonov (HZB, Berlin), Jens Knobloch (HZB, Berlin; University of Siegen, Siegen), Wolfgang Ackermann, Herbert De Gersem (TEMF, TU Darmstadt, Darmstadt), Xin Jiang, A. Ozdem Sezgin, Michael Vogel (University Siegen, Siegen), Marc Wenskat (University of Hamburg, Hamburg)

TUPOTK006 **Systematic Investigation of Flux Trapping Dynamics on Samples**

Author: Felix Kramer, Sebastian Keckert (HZB, Berlin), Oliver Kugeler (BESSY GmbH, Berlin; HZB, Berlin), Jens Knobloch (BESSY GmbH, Berlin; HZB, Berlin; University of Siegen, Siegen)

TUPOTK007 **Nb3Sn Co-Sputtering for Interlayer-Free High Performance Copper SRF Cavities**

Author: Nils Schäfer, Lambert Alff, Carl Jung, Matthias Mahr (TU Darmstadt, Darmstadt), Marton Major (TU Darmstadt, Darmstadt; Wigner Research Centre for Physics, Budapest)

TUPOTK008 **Cavity Designs for the Ch3 to Ch11 and Bellow Tuner Investigation of the Superconducting Heavy Ion Accelerator Heliac**

Author: Thorsten Conrad, Marco Busch, Holger Podlech, Malte Schwarz (IAP, Frankfurt am Main), Markus Basten, Manuel Heilmann, Anna Rubin, Alexander Schnase, Stepan Yaramyshev (GSI, Darmstadt), Winfried A. Barth, Florian Dirk Dziuba (GSI, Darmstadt; HIM, Mainz), Viktor Gettmann, Thorsten Kuerzeder, Simon Lauber, Julian Arthur List, Maksym Miski-Oglu (HIM, Mainz), Kurt Aulenbacher (HIM, Mainz; IKP, Mainz)

TUPOTK009 **Development of Superconducting CH Cavity Preparation**

Author: Patrick Mueller, Holger Podlech (IAP, Frankfurt am Main), Winfried A. Barth, Markus Basten (GSI, Darmstadt), Viktor Gettmann, Thorsten Kuerzeder, Maksym Miski-Oglu (GSI, Darmstadt; HIM, Mainz), Kurt Aulenbacher, Florian Dirk Dziuba (HIM, Mainz)

TUPOTK010 **Nitric Acid Soaking After Imperfect Furnace Treatments**

Author: Rezvan Ghanbari, Arti Dangwal Pandey (DESY, Hamburg), Christopher Bate, Wolfgang Carl Albert Hillert, Marc Wenskat (University of Hamburg, Hamburg)

TUPOTK011 **Commissioning of a New Magnetometric Mapping System for SRF Cavity Performance Tests**

Author: Jonas Christian Wolff, Juergen Eschke, Andre Goessel, Detlef Reschke, Lea Steder, Lennart Trelle (DESY, Hamburg), Wolfgang Carl Albert Hillert (University of Hamburg, Hamburg)

TUPOTK012 **Nitrogen Infusion Sample R&D at DESY**

Author: Christopher Bate, Wolfgang Carl Albert Hillert, Marc Wenskat (University of Hamburg, Hamburg), Alexey Ermakov, Detlef Reschke, Joern Schaffran (DESY, Hamburg)

TUPOTK013 **PEALD SIS Studies for SRF Cavities**

Author: Isabel González Díaz-Palacio, Robert Blick, Wolfgang Carl Albert Hillert, Andreas Stierle, Robert Zierold (University of Hamburg, Hamburg), Arno Jeromin (DESY Nanolab, Hamburg), Thomas Keller, Nicolay Krupka (DESY, Hamburg), Marc Wenskat (DESY, Hamburg; University of Hamburg, Hamburg)

TUPOTK014 **Refurbishment of SRF cavities and HOM antenna coating studies for MESA***

Author: Paul Simon Plattner, Florian Hug, Timo Stengler (KPH, Mainz)

TUPOTK015 **HOM Coupler Design and Optimization for the FCC-ee W Working Point**

Author: Sosoho-Abasi Udongwo, Ursula van Rienen, Shahnam Zadeh (Rostock University, Rostock), Rama Calaga (CERN, Meyrin)

TUPOTK016 **HiPIMS-Coated Novel S(I)S Multilayers for SRF Cavities**

Author: A. Ozdem Sezgin, Xin Jiang, Bharath Reddy Lakki Reddy Venkata, Michael Vogel (University Siegen, Siegen), Rastislav Ries, Eugen Seiler (Slovak Academy of Sciences, Bratislava), Isabel González Díaz-Palacio, Robert Zierold (University of Hamburg, Hamburg)

TUPOTK017 **New Sputtering Coating Facility for Nb-Based Thin Films in 1.3 GHz Cavities**

Author: Michael Vogel, Xin Jiang, A. Ozdem Sezgin (University Siegen, Siegen)

TUPOTK018 **Combined In-Situ QEXAFS and XRD Investigations on Nb-Treatments in N2 Gas-atmospheres at Elevated Temperatures**

Author: Patrick Rothweiler, Franz Eckelt, Dirk Lützenkirchen-Hecht, Sebastian Paripsa, Lukas Voß (University of Wuppertal, Wuppertal)

TUPOTK020 **Status of LASA-INFN R&D Activity on PIP-II Low-beta Prototypes**

Author: Michele Bertucci, Angelo Bosotti, Alessio D'Ambros, Elisa Del Core, Aldo Tommaso Grimaldi, Laura Monaco, Rocco Paparella, Daniele Sertore (INFN/LASA, Segrate (MI)), Carlo Pagani (INFN/LASA, Segrate (MI); Università degli Studi di Milano & INFN, Segrate), Ambra Gresele (Zanon Research & Innovation, Schio, VI)

TUPOTK021 **Recent Update on ESS Medium Beta Cavities at INFN LASA**

Author: Daniele Sertore, Michele Bertucci, Massimo Bonezzi, Angelo Bosotti, Daniele Cardelli, Alessio D'Ambros, Aldo Tommaso Grimaldi, Laura Monaco, Rocco Paparella, Giuliano Manuel Zaggia (INFN/LASA, Segrate (MI)), Carlo Pagani (Università degli Studi di Milano & INFN, Segrate)

TUPOTK022 **INFN-LASA for the Fermilab PIP-II**

Author: Rocco Paparella, Michele Bertucci, Massimo Bonezzi, Angelo Bosotti, Daniele Cardelli, Alessio D'Ambros, Elisa Del Core, Aldo Tommaso Grimaldi, Laura Monaco, Daniele Sertore, Giuliano Manuel Zaggia (INFN/LASA, Segrate (MI)), Carlo Pagani (Università degli Studi di Milano & INFN, Segrate)

TUPOTK023 **Study on Commercial Diodes as Thermometers at Low Temperature for Temperature Mapping System of Nb3Sn Superconducting Radiofrequency Cavities**

Author: Ramnarong Wanison (Department of Mechanical Engineering, Faculty of Engineering, Chiang Mai University, Chiang Mai; KEK, Ibaraki), Kensei Umemori, Tomohiro Yamada (KEK, Ibaraki), Kotaro Takahashi (Sokendai, Ibaraki)

TUPOTK024 **Multipacting Simulation on Half-Wave Resonator for 200 MeV Energy Upgrade of KOMAC Proton Linac**
Author: Jeong-Jeung Dang, Han-Sung Kim, Hyeok-Jung Kwon, Seunghyun Lee (KOMAC, KAERI, Gyeongju)

TUPOTK025 **Design Study of the 3rd Harmonic Superconducting Cavity for a Bunch Lengthening**
Author: Junyoung Yoon, Eun-San Kim (KUS, Sejong), Eiji Kako (KEK, Ibaraki), Junho Han, HeeSu Park (Kiswire Advanced Technology Ltd., Daejeon)

TUPOTK026 **ESS Elliptical Cryomodules Tests at Lund Test Stand**
Author: Cecilia Giovanna Maiano, Emilio Asensi Conejero, Nuno Elias, Philippe Goudket, Wolfgang Hees, Paolo Pierini, Luca Sagliano, Felix Schlander, Muyuan Wang (ESS, Lund), Dariusz Bocian, Wawrzyniec Gaj, Pawel Halczynski, Michal Sienkiewicz, Filip Daniel Skalka, Jacek Swierblewski, Krystian Michal Wartak, Marcin Wartak (IFJ-PAN, Kraków)

TUPOTK027 **Field Emission Measurements at ESS Lund Test Stand**
Author: Cecilia Giovanna Maiano, Nuno Elias, Emanuele Laface, Paolo Pierini, Luca Sagliano, Muyuan Wang (ESS, Lund), Enrico Cenni (CEA-IRFU, Gif-sur-Yvette)

TUPOTK028 **Tuning of Superconducting Cavities Using the FFT of Transmitted Power**
Author: Emanuele Laface, Cecilia Giovanna Maiano, Paolo Pierini, Muyuan Wang (ESS, Lund)

TUPOTK029 **Open XAL Status Report 2022**
Author: Alexander Zhukov, Austin Hoover, Andrei P. Shishlo (ORNL, Oak Ridge, Tennessee), Juan Federico Esteban Muller, Emanuele Laface, Yngve Levinsen, Natalia Milas (ESS, Lund)

TUPOTK030 **X-Rays Energy Measurements During the RFQ Conditioning at the European Spallation Source**
Author: Emanuele Laface, Cecilia Giovanna Maiano, Rihua Zeng (ESS, Lund), Olivier Piquet (CEA-DRF-IRFU,)

TUPOTK031 **First Closed and Open 6 GHz Cavity Deposition With A15 and B1 Superconducting Thin Film at ASTeC**
Author: Reza Valizadeh, Adrian Hannah (STFC/DL/ASTeC, Daresbury, Warrington, Cheshire), Oleg B. Malyshev (Cockcroft Institute, Warrington, Cheshire; STFC/DL/ASTeC, Daresbury, Warrington, Cheshire), Eduard Chyhyrynets, Vanessa Andreina Garcia Diaz, Cristian Pira (INFN/LNL, Legnaro (PD)), Gavin Stenning (STFC/RAL/ISIS, Chilton, Didcot, Oxon), Vinod Dhanak (The University of Liverpool, Liverpool)

TUPOTK033 **First RF Measurements of Planar SRF Thin Films with a High Throughput Test Facility at Daresbury Laboratory**
Author: Daniel Seal, Graeme Burt, Bhagat-Taaj Singh Sian (Cockcroft Institute, Warrington, Cheshire; Lancaster University, Lancaster), Harry Saul Marks (Cockcroft Institute, Lancaster), Philippe Goudket (Cockcroft Institute, Warrington, Cheshire; ESS, Lund; STFC/DL/ASTeC, Daresbury, Warrington, Cheshire), Oleg B. Malyshev, Reza Valizadeh (Cockcroft Institute, Warrington, Cheshire; STFC/DL/ASTeC, Daresbury, Warrington, Cheshire)

TUPOTK034 **Evaluating the Effects of Nitrogen Doping and Oxygen Doping on SRF Cavity Performance**
Author: Hannah Hu, Young-Kee Kim (University of Chicago, Chicago, Illinois), Daniel Bafia (Fermilab, Batavia, Illinois)

TUPOTK035 **CVD Nb3Sn-on-Copper SRF Accelerator Cavities**

Author: Gabriel Gaitan, Peter Nicholas Koufalis (Cornell University (CLASSE), Ithaca, New York), Matthias Liepe (Cornell University, Ithaca, New York; Cornell University (CLASSE), Ithaca, New York), Victor Arrieta, Shawn Rex McNeal (Ultra-met, Pacoima, California)

TUPOTK036 **Study of Chemical Treatments to Optimize Nb3Sn Growth in the Nucleation Phase**

Author: Liana Shpani, Sophia Gray Arnold, Gabriel Gaitan, Matthias Liepe, Zeming Sun (Cornell University (CLASSE), Ithaca, New York), Tomas Arias, Michelle Marie Kelley, Nathan Sitaraman (Cornell University, Ithaca, New York)

TUPOTK037 **Status Update on Cornell's SRF Compact Conduction Cooled Cryomodule**

Author: Neil Anthony Stilin, Adam Holic, Matthias Liepe, Tim O'Connell, James Sears, Valery D. Shemelin, Jessica Turco (Cornell University (CLASSE), Ithaca, New York)

TUPOTK038 **Next Generation SRF Cavities at Cornell University**

Author: Nicole Verboncoeur, Matthias Liepe, Ryan Douglas Porter, Liana Shpani (Cornell University (CLASSE), Ithaca, New York)

TUPOTK040 **Design of the Electron Ion Collider Electron Storage Ring SRF cavity**

Author: Jiquan Guo, James Henry, Joseph Matalevich, Gunn-Tae Park, Joseph P. Preble, Robert Rimmer, Haipeng Wang, Shaoheng Wang (JLab, Newport News, Virginia), Douglas Holmes, Kevin S. Smith, Wencan Xu, Alex Zaltsman (BNL, Upton, New York)

TUPOTK042 **Challenges to Reliable Production Usage of Nitrogen Doping of Nb for Use in SRF Accelerators**

Author: Charles E. Reece, Eric Lechner, Ari Deibert Palczewski (JLab, Newport News, Virginia), Michael Kelley (JLab, Newport News, Virginia; Virginia Polytechnic Institute and State University, Blacksburg), Fred Stevie (NCSU AIF, Raleigh, North Carolina), Jonathan Willis Angle (Virginia Polytechnic Institute and State University, Blacksburg)

TUPOTK043 **First Prototype of X-Band Deflecting Structure Applied on SHINE**

Author: Jianhao Tan, Wencheng Fang, Qiang Gu, Xiaoxia Huang, Cheng Wang, Chengcheng Xiao, Junqiang Zhang, Zhentang Zhao (SSRF, Shanghai)

TUPOTK044 **Preliminary Results of a Combined Magnetic and Temperature Mapping System for 3 GHz Superconducting Radio Frequency Cavities**

Author: Ishwari Prasad Parajuli, Alexander Gurevich, Bashu Dev Khanal (ODU, Norfolk, Virginia), Gianluigi Ciovati, Jean Roger Delayen (JLab, Newport News, Virginia; ODU, Norfolk, Virginia)

TUPOTK045 **Magnetic Field Mapping of 1.3 GHz Superconducting Radio Frequency Niobium Cavities**

Author: Ishwari Prasad Parajuli, Alexander Gurevich (ODU, Norfolk, Virginia), Gianluigi Ciovati, Jean Roger Delayen (JLab, Newport News, Virginia; ODU, Norfolk, Virginia)

TUPOTK046 **Status of HOM Damper for EIC eSR SRF Cavity**

Author: Wencan Xu, Zachary Alan Conway, Douglas Holmes, Kevin S. Smith, Daniel Weiss, Alex Zaltsman (BNL, Upton, New York), Jiquan Guo, Joseph P. Preble, Robert Rimmer (JLab, Newport News, Virginia), Tom Schultheiss (TJS Technologies, Commack, New York)

TUPOTK048 **Optimization of a 600 MHz Two-Cell Slotted Waveguide Elliptical Cavity for FCC-ee**

Author: Shahnam Gorgi Zadeh (CERN, Geneve 23), Igor Syratchev (CERN, Geneva), Olivier Brunner, Franck Peauger (CERN, Meyrin)

TUPOTK049 **Upgrade of ELSA's Booster Synchrotron RF with a Solid State Amplifier**

Author: Michael Thomas Switka, Klaus Desch, Daniel Elsner, Frank Frommberger, P. Haenisch (ELSA, Bonn)

TUPOTK050 **Development of Zynq SoC-Based EPICS IOC for KOMAC Remote Control System**

Author: Young-Gi Song, SungYun Cho, Jae-ha Kim, Sang-Pil Yun (KOMAC, KAERI, Gyeongju)

TUPOTK051 **Design Studies on a High-Power Wide-Band RF Combiner for Consolidation of the Driver Amplifier of the J-PARC RCS**

Author: Hidefumi Okita, Keigo Hara, Katsushi Hasegawa, Masahiro Nomura, Taihei Shimada, Fumihiko Tamura, Masanobu Yamamoto (KEK/JAEA, Ibaraki-Ken), Mauro M. Paoluzzi (CERN, Meyrin), Chihiro Ohmori, Masahito Yoshii (KEK, Ibaraki), Yasuyuki Sugiyama (KEK, Tokai, Ibaraki)

TUPOTK052 **Influence of a Positive Grid Biasing on RF System in J-PARC RCS**

Author: Masanobu Yamamoto, Hidefumi Okita (JAEA/J-PARC, Tokai-Mura, Naka-Gun, Ibaraki-Ken), Masahiro Nomura, Taihei Shimada, Fumihiko Tamura (JAEA/J-PARC, Tokai-mura), Keigo Hara, Katsushi Hasegawa, Chihiro Ohmori, Yasuyuki Sugiyama, Masahito Yoshii (KEK, Tokai, Ibaraki)

TUPOTK053 **Design Study of High Efficiency Klystron for CEPC LINAC**

Author: Zhandong Zhang, Shu Zhang (IHEP, Beijing; UCAS, Beijing), Munawar Iqbal (IHEP,), Yunlong Chi, Dong Dong, Guoxi Pei, Shengchang Wang, Ouzheng Xiao, Zusheng Zhou (IHEP, Beijing)

TUPOTK054 **Solid State Amplifiers for Beam Test System of PAPS at IHEP**

Author: Ouzheng Xiao (IHEP,), Yunlong Chi, Nan Gan, Xiaoping Li, Zhandong Zhang (IHEP, Beijing)

TUPOTK055 **One Year of Operation of the New Wideband RF System of the Proton Synchrotron Booster**

Author: Giulia Gnemmi, Salvatore Energico, Carlo Rossi (CERN, Geneva 23), Mauro M. Paoluzzi (CERN, Geneva), Matthias Haase (CERN, Meyrin)

TUPOTK057 **Innovative Magnetron Power Sources for Superconducting RF (SRF) Accelerators**

Author: Michael Neubauer, Grigory Kazakevich, Ronald R. Lentz, Milorad Popovic, Tony Wynn (Muons, Inc, Illinois), Robert Rimmer, Haipeng Wang (JLab, Newport News, Virginia)

TUPOTK058 **Development and Testing of High Power CW 1497 MHz Magnetron**

Author: Milorad Popovic, Mary Anne Clare Cummings, Rolland Paul Johnson, Ronald R. Lentz, Michael Neubauer, Tony Wynn (Muons, Inc, Illinois), Kevin Jordan, Robert Rimmer, Haipeng Wang (JLab, Newport News, Virginia), Thomas Blassick, Jerry K. Wessel (Richardson Electronics Ltd, Lafox, Illinois)

TUPOTK059 **Modeling O and N Alloying in Nb for SRF Applications**

Author: Eric Lechner, Ari Deibert Palczewski, Charles E. Reece (JLab, Newport News, Virginia), Michael Kelley (JLab, Newport News, Virginia; Virginia Polytechnic Institute and State University, Blacksburg), Fred Stevie (NCSU AIF, Raleigh, North Carolina), Jonathan Willis Angle (Virginia Polytechnic Institute and State University, Blacksburg)

TUPOTK060 **Simulations of Miscut Effects on the Efficiency of a Crystal Collimation System**

Author: Marco D'Andrea, Daniele Mirarchi, Stefano Redaelli (CERN, Geneva)

TUPOTK061 **Prospect to Apply Machine Learning to Optimize the Operation of the Crystal Collimation System at the LHC**

Author: Marco D'Andrea, Gabriella Azzopardi, Mario Di Castro, Daniele Mirarchi, Stefano Redaelli, Gianluca Valentino (CERN, Geneva), Eloise Matheson (CERN, Meyrin), Gianmarco Ricci (Sapienza University of Rome, Rome)

TUPOTK062 **Settings for Improved Betatron Collimation in the First Run of the High Luminosity LHC**

Author: Bjorn Lindstrom, Andrey Abramov, Roderik Bruce, Riccardo De Maria, James Molson, Stefano Redaelli (CERN, Meyrin), Pascal Dominik Hermes, Frederik Florentinus Van der Veken (CERN, Geneva)

TUPOTK063 **CERN Linac4 Chopper Dump: Operational Experience and Future Upgrades**

Author: Calum James Sharp, Pablo Andreu Muñoz, Marco Calviani, Gabriele Costa, Luigi Salvatore Esposito, Rui Franqueira Ximenes, Damien Grenier, Edouard Grenier-Boley, James Robert Hunt, Alexander Michael Krainer, Christophe Yves Mucher, Claudio Torregrosa (CERN, Meyrin)

TUPOTK064 **HL-LHC Crab Cavity HOM Couplers Challenges and Results**

Author: James Alexander Mitchell, Rama Calaga, Eric Montesinos (CERN, Meyrin)

TUPOTK065 **Design of a Harmonic Superconducting RF Cavity for HALF Storage Ring**

Author: Yelong Wei, Baiting Du, Guangyao Feng, Dachun Jia, Jian Pang, Shancai Zhang (USTC/NSRL, Hefei, Anhui), Carsten Peter Welsch, Hao Dai Zhang (The University of Liverpool, Liverpool; Cockcroft Institute, Warrington, Cheshire)

Jun 14, 2022 16:00 - 18:00 Poster Session Poster Area Matsaman

TUPOMS - Poster Session - Matsaman

TUPOMS001 **Conceptual Design of a Future Australian Light Source**

Author: Yelong Wei, Baiting Du, Guangyao Feng, Dachun Jia, Jian Pang, Shancai Zhang (USTC/NSRL, Hefei, Anhui), Carsten Peter Welsch, Hao Dai Zhang (The University of Liverpool, Liverpool; Cockcroft Institute, Warrington, Cheshire)

TUPOMS002 **Status of Sirius Phase 1 Operation**

Author: Lin Liu, Murilo Barbosa Alves, Fernando Henrique de Sá, Ana Clara de Souza Oliveira, Ximenes Rocha Resende, Rafael Molena Seraphim, Harry Westfahl Jr. (LNLS, Campinas), Ruy Farias, Sergio Rodrigo Marques (CNPEM, Campinas, SP)

TUPOMS003 **CLS Operational Status and Future Operational Plans**

Author: Mark James Boland, Frederic Le Pimpec (CLS, Saskatoon, Saskatchewan)

TUPOMS004 **TDR Baseline Lattice for the SOLEIL Upgrade**

Author: Alexandre Loulergue, David Amorim, Oscar Roberto Blanco-García, Pascale Brunelle, Watanyu Foosang, Alexis Gamelin, Amor Nadji, Laurent Stanislas Nadolski, Ryutaro Nagaoka, Randy Ollier, Marie-Agnès Tordeux (SOLEIL, Gif-sur-Yvette)

TUPOMS005 **SOLEIL Machine Status**

Author: Laurent Stanislas Nadolski, Gwenaelle Abeille, Yves-Marie Abiven, Nicolas Béchu, Francois Bouvet, Pascale Brunelle, Marie-Emmanuelle Couprie, Xavier Deletoille, Alexis Gamelin, Christian Herbeaux, Nicolas Hubert, Jean-Francois Lamarre, Vincent Le Roux, Alain Lestrade, Alexandre Loulergue, Olivier Marcouillé, Fabrice Marteau, Amor Nadji, Ryutaro Nagaoka, Sandra Pierre-Joseph Zephir [on leave], Fernand Ribeiro, Gilbert Schaguene, Keihan Tavakoli, Marie-Agnès Tordeux (SOLEIL, Gif-sur-Yvette)

TUPOMS006 **FILO: A New Application to Correct Optics in the ESRF-EBS Storage Ring**

Author: Simone Maria Liuzzo, Nicola Carmignani, Lee Robert Carver, Laurent Farvacque, Lina Hoummi, Thomas Perron, Benoit Roche, Bruno Vedder, Simon Mathieu White (ESRF, Grenoble)

TUPOMS007 **A Long Booster Option for the ESRF-EBS 6 GeV Storage Ring**

Author: Simone Maria Liuzzo, Nicola Carmignani, Lee Robert Carver, Lina Hoummi, Thomas Perron, Simon Mathieu White (ESRF, Grenoble)

TUPOMS008 **Lifetime Correction Using Fast-Off-Energy Response Matrix Measurements**

Author: Simone Maria Liuzzo, Nicola Carmignani, Lee Robert Carver, Lina Hoummi, Thomas Perron, Benoit Roche, Simon Mathieu White (ESRF, Grenoble)

TUPOMS009 **First Year of Operation of the ESRF-EBS Ligth Source**

Author: Jean-Luc Revol, Chamseddine Benabderrahmane, Pawel Borowiec, Elena Buratin, Nicola Carmignani, Lee Robert Carver, Alessandro D'Elia, Marc Dubrulle, Friederike Ewald, Andrea Franchi, Georges Gautier, Laurent Hardy, Lina Hoummi, Jörn Jacob, Laurent Jolly, Gaël Le Bec, Isabelle Leconte, Simone Maria Liuzzo, Mathieu Morati, Thomas Perron, Qing Qin, Benoit Roche, Kees Bertus Scheidt, Vincent Serriere, Reine Versteegen, Simon Mathieu White (ESRF, Grenoble)

TUPOMS010 **BESSY III Status Report and Overview**

Author: Paul Goslawski, Michael Abo-Bakr, Johan Bengtsson, Karsten Holldack, Andreas Jankowiak, Bettina Christa Kuske, Atoosa Meseck, Jens Viefhaus, Jens Voelker (HZB, Berlin)

TUPOMS011 **Progress Towards EEHG Seeding at the DELTA Storage Ring**

Author: Benedikt Büsing, Arne Held, Hubertus Kaiser, Shaukat Khan, Carsten Mai, Arjun Radha Krishnan (DELTA, Dortmund)

TUPOMS012 **Spectro-Temporal Properties of CHG Radiation**
Author: Arjun Radha Krishnan, Benedikt Büsing, Arne Held, Hubertus Kaiser, Shaukat Khan, Carsten Mai, Zohair Usfoor, Vivek Vijayan (DELTA, Dortmund)

TUPOMS013 **Novel, High Repetition Rate, CW SSRF Linac-Based, Multispectral Photon Source**
Author: Pavel Evtushenko (HZDR, Dresden)

TUPOMS014 **PETRA IV Storage Ring Design**
Author: Ilya Agapov, Sergey A. Antipov, Riccardo Bartolini, Reinhard Brinkmann, Yong-Chul Chae, Dieter Einfeld, Thorsten Hellert, Markus Huening, Marc Andre Jebramcik, Joachim Keil, Chao Li, Rainer Wanzenberg (DESY, Hamburg)

TUPOMS015 **Proposal for Girder Realignment Test in PETRA III**
Author: Michaela Schaumann, Ilya Agapov, Riccardo Bartolini, Michael Bieler, Ralph Bospflug, Dieter Einfeld, Markus Hoffmann, Joachim Keil, Lang Liao, Gunnar Priebe, Markus Schloesser, Rainer Wanzenberg (DESY, Hamburg)

TUPOMS016 **A Pipeline for Orchestrating Machine Learning and Controls Applications**
Author: Ilya Agapov, Michael Boese, Lukas Malina (DESY, Hamburg)

TUPOMS018 **Error Analysis and Commissioning Simulation for the PETRA-IV Storage Ring**
Author: Thorsten Hellert, Ilya Agapov, Sergey A. Antipov, Riccardo Bartolini, Reinhard Brinkmann, Yong-Chul Chae, Dieter Einfeld, Marc Andre Jebramcik, Joachim Keil (DESY, Hamburg)

TUPOMS019 **Collimation Strategy for the Low-Emittance PETRA IV Storage Ring**
Author: Marc Andre Jebramcik, Ilya Agapov, Sergey A. Antipov, Riccardo Bartolini, Reinhard Brinkmann, Dieter Einfeld, Thorsten Hellert, Joachim Keil (DESY, Hamburg)

TUPOMS020 **Long-Term Orbit Stability in the PETRA III Storage Ring**
Author: Lang Liao, Michael Bieler, Joachim Keil, Chao Li, Michaela Schaumann, Rainer Wanzenberg (DESY, Hamburg)

TUPOMS021 **PETRA III Operational Performance and Availability**
Author: Rainer Wanzenberg, Michael Bieler, Joachim Keil, Lang Liao, Gajendra Kumar Sahoo, Michaela Schaumann (DESY, Hamburg)

TUPOMS022 **Cooling Challenges in a NEG-Coated Vacuum Chamber of a Light Source**
Author: Saeid Talebi Motlagh, Amir Danaeifard, Javad Rahighi, Farhad Saeidi (ILSF, Tehran), Farhad Zamani (University of Kashan, Kashan)

TUPOMS023 **The Elettra 2.0 Project**
Author: Emanuel Karantzoulis, Alessandro Fabris, Stefano Krecic (Elettra-Sincrotrone Trieste S.C.p.A., Basovizza)

TUPOMS024 **Sensitivity of EEHG Simulations to Dynamic Beam Parameters**

Author: Dmitrii Samoilenko, Wolfgang Carl Albert Hillert, Fabian Pannek (University of Hamburg, Hamburg), Sven Ackermann, Eugenio Ferrari, Najmeh Sadat Mirian, Pardis Niknejadi, Georgia Paraskaki, Lucas Schaper (DESY, Hamburg), Francesca Curbis, Mihai Alexandru Pop, Sverker Werin (MAX IV Laboratory, Lund)

TUPOMS026 **Results of the Beam Dynamics Simulations and Accelerating Structures Optimization for the USSR Light Source Injector**

Author: Sergey Markovich Polozov (MEPhI, Moscow; NRC, Moscow), Mikhail Krasilnikov (DESY Zeuthen, Zeuthen), Anna Giribono (INFN/LNF, Frascati), David Alesini, Cristina Vaccarezza, Mikhail Zobov (LNF-INFN, Frascati), Yulia Kliuchevskaia (MEPhI, Moscow), Ilya Ashanin, Mariya Gusarova, Alexey Igorevich Pronikov, Vladimir Ivanovich Rashchikov (NRC, Moscow; MEPhI, Moscow), Simone Tocci (Sapienza University of Rome, Rome)

TUPOMS027 **ALBA II Acelerator Upgrade Project**

Author: Francis Perez, Ignasi Bellafont, Gabriele Benedetti, Josep Campmany, Michele Carlà, Joan Josep Casas, Carles Colldelram, Ferran Fernandez, Juan Carlos Giraldo, Thomas Friedrich Günzel, Ubaldo Iriso, Jordi Marcos, Zeus Martí, Valentí Massana, Raquel Muñoz Horta, Montserrat Pont, Llibert Ribo, Pol Solans, Laura Torino (ALBA-CELLS Synchrotron, Cerdanyola del Vallès)

TUPOMS028 **3HC - 3rd Harmonic Normal Conducting Active Cavity Collaboration Between HZB, DESY and ALBA**

Author: Francis Perez, Jesus Ramon Ocampo, Angela Salom, Pol Solans (ALBA-CELLS Synchrotron, Cerdanyola del Vallès), Michael Ebert, Ruediger Onken (DESY, Hamburg), Peter Hülsmann (GSI, Darmstadt), Wolfgang Anders, Volker Duerr, Tobias Loewner, Alexander N. Matveenko, Markus Ries, Liangliang Shi, Yegor Tamashevich, Andranik Tsakanian (HZB, Berlin), Wolfgang F.O. Müller (TEMF, TU Darmstadt, Darmstadt)

TUPOMS029 **Status of the PETRA IV Project**

Author: Riccardo Bartolini, Ilya Agapov, Reinhard Bacher, Ralph Bospflug, Hans-Joerg Eckoldt, Markus Huening, Lutz Lilje, Frank Obier, Ruediger Onken, Alexander Petrov, Johannes Prenting, Holger Schlarb, Matthias Thede, Markus Tischer (DESY, Hamburg)

TUPOMS030 **Event Tree Model for Safety Reliability Analysis of High Energy Electron 1.2 GeV Radiation Monitoring System Design**

Author: Pawitra Aim-O, Preecha Kulthanasomboon (SLRI, Nakhon-Ratchasima), Niken Siwi Pamungkas (Chulalongkorn University, Bangkok), Somsak Ruengpoonwittaya, Methee Sophon, Nattaphol Sumano, Athikarn Thongwat (SLRI, Nakhon Ratchasima), Keerati Manasatitpong (Synchrotron Light Research Institute (SLRI), Muang District), Kriengkrai Puwadolkij (Thailand Institute of Nuclear Technology, Nakhon Nayok)

TUPOMS031 **Fill Pattern for Reducing Transient Beam Loading and Ion-Trapping in the Diamond-II Storage Ring**

Author: Teresia Olsson, Hung-Chun Chao (DLS, Oxfordshire)

TUPOMS032 **COLLIMATORS IN DIAMOND-II STORAGE RING LATTICE**

Author: Hossein Ghasem, Jonas Kallestrup, Ian Martin (DLS, Oxfordshire)

TUPOMS033 **Progress With the Diamond-II Storage Ring Lattice Design**
Author: Ian Martin, Hung-Chun Chao, Richard Fielder, Hossein Ghasem, Jonas Kallestrup, Teresia Olsson, Beni Singh, Siwei Wang (DLS, Oxfordshire)

TUPOMS034 **TUNABILITY AND ALTERNATIVE OPTICS FOR DIAMOND STORAGE RING UPGRADE**
Author: Hossein Ghasem, Ian Martin, Beni Singh (DLS, Oxfordshire)

TUPOMS035 **Emittance Feedback for the Diamond-II Storage Ring using Resonant Excitation**
Author: Shaun Preston, Teresia Olsson, Beni Singh (DLS, Oxfordshire)

TUPOMS036 **Commissioning of the Lower Emittance Lattice at SPEAR3**
Author: Kai Tian, Jeff Corbett, Xiaobiao Huang, Jaehyun Kim, Jay Langton, Nicholas Parry, James A. Safranek, James J. Sebek, Minghao Song, Zhe Zhang (SLAC, Menlo Park, California)

TUPOMS037 **RCDS-S: Robust Conjugate Direction Safety Search**
Author: Zhe Zhang, Xiaobiao Huang, Minghao Song (SLAC, Menlo Park, California)

TUPOMS038 **RFQ NEWGAIN: RF and Thermomechanical Design**
Author: Pierrick Hamel, Nadia Sellami (CEA-IRFU, Gif-sur-Yvette), Michel Jean Desmons, Olivier Piquet, Benjamin Prevet (CEA-DRF-IRFU,)

TUPOMS039 **Design, Fabrication and Test of a High Beta HWR Prototype for the DONES Project**
Author: Juliette Plouin, Matthieu Baudrier, Elise Fayette (CEA-DRF-IRFU,), Nicolas Bazin, Stéphane Chel, Guillaume Devanz, Grégoire Jullien, Luc Maurice, Christophe Servouin (CEA-IRFU, Gif-sur-Yvette)

TUPOMS040 **Characterization of Higher-order-mode (HOMs) in THOMX Storage Ring RF Cavity**
Author: Mohamed El Khaldi, Jean-Noël Cayla, Hugues Monard (Université Paris-Saclay, CNRS/IN2P3, IJCLab, Orsay), Massamba Diop, Fernand Ribeiro (SOLEIL, Gif-sur-Yvette)

TUPOMS041 **High Power RF-Cavity Development for the HBS-Driver LINAC**
Author: Markus Basten, Christoph Burandt, Viktor Gettmann, Thorsten Kuerzeder, Maksym Miski-Oglu (GSI, Darmstadt; HIM, Mainz), Markus Vossberg, Stepan Yaramyshev (GSI, Darmstadt), Kurt Aulenbacher, Winfried A. Barth, Florian Dirk Dziuba, Simon Lauber, Julian Arthur List (GSI, Darmstadt; HIM, Mainz; KPH, Mainz), Holger Podlech (HFHF, Frankfurt am Main; IAP, Frankfurt am Main), Thomas Gutberlet (JCNS, Jülich)

TUPOMS042 **Cavity R&D for HBS Accelerator**
Author: Nils Frederick Petry, Klaus Kümpel, Sarah Lamprecht, Oliver Meusel, Holger Podlech, Malte Schwarz (IAP, Frankfurt am Main)

TUPOMS043 **High Power Tests of a New 4-Rod RFQ with Focus on its Mechanical Vibrations**
Author: Stephan Wagner, Daniel Koser, Klaus Kümpel (IAP, Frankfurt am Main), Markus Basten (GSI, Darmstadt; HIM, Mainz), Holger Podlech (IAP, Frankfurt am Main; HFHF, Frankfurt am Main), Kai Bahrke-Rein (TU Darmstadt, Darmstadt)

TUPOMS044 **Dielectric Loaded THz Waveguide Experimentally Optimized by Dispersion Measurements**
Author: Max Joseph Kellermeier, Ralph Wolfgang Assmann, Klaus Floettmann, Francois Lemery (DESY, Hamburg), Wolfgang Carl Albert Hillert (University of Hamburg, Hamburg)

TUPOMS045 **Design Validation of High Current Injector Facility at IUAC DELHI**
Author: Dr Rajesh Vikram Hariwal, Rajeev Ahuja, Pradip Barua, Radhakishan Gurjar, Sanjay Kumar Kedia, Ashok Kothari, Ajith Kumar, Mukesh Kumar, Prem Kumar, Raj Kumar, Rajesh Kumar, Sarvesh Kumar, Sugam Kumar, Singh Kundan, Plankudy S. Lakshmy, Kedar Mal, A. Malyadri, Yadhuvansh Mathur, Rajeev Mehta, Deepak Kumar Munda, U. Naik, U. Rao, Gerard Oscar Rodrigues, Cholakka Parambath Safvan, Abhijit Sarkar, Chandrapal Shakya, Parmanand Singh, Somasundara Kumar Sonti, Subhash Kumar Suman, Thomas Varughese, Sankar Raja Venkataramanan, Veera Venkata Satyanarayana Venna, Jimson Zacharias (IUAC, New Delhi)

TUPOMS046 **Fabrication and Low-Power Test of Disk-and-Washer Cavity for Muon Acceleration**
Author: Yusuke Takeuchi, Junji Tojo (Kyushu University, Fukuoka), Yuga Nakazawa (Ibaraki University, Hitachi, Ibaraki), Yasuhiro Kondo (JAEA, Ibaraki-ken), Ryo Kitamura (JAEA/J-PARC, Tokai-Mura, Naka-Gun, Ibaraki-Ken), Takatoshi Morishita (JAEA/J-PARC, Tokai-mura), Ersin Cicek, Hiroyasu Ego, Kenta Futatsukawa, Naritoshi Kawamura, Masashi Otani, Takayuki Yamazaki, Mitsuhiro Yoshida (KEK, Ibaraki), Tsutomu Mibe, Naohito Saito (KEK, Tsukuba), Yoshihisa Iwashita (Kyoto University, Osaka), Yuki Sue, Kazumichi Sumi, Mai Yotsuzuka (Nagoya University, Chikusa-ku, Nagoya), Hiromasa Yasuda (University of Tokyo, Tokyo)

TUPOMS047 **High-Power Experiment of a C-Band Photocathode Electron Gun**
Author: Cheng Wang (SARI-CAS, Pudong, Shanghai), Zihe Gao (SINAP, Shanghai), Wencheng Fang, Xiaoxia Huang, Jianhao Tan, Chengcheng Xiao, Junqiang Zhang (SSRF, Shanghai)

TUPOMS049 **Digital LLRF for the Canadian Light Source**
Author: Pol Solans, Francis Perez, Angela Salom (ALBA-CELLS Synchrotron, Cerdanyola del Vallès), Denis Roger Beauregard, Connor Boyle, Jignya Mansukhbhai Patel, Hamed Shaker, Jonathan Stampe (CLS, Saskatoon, Saskatchewan)

TUPOMS050 **Study and Design of the High Power RF Coupler for the Short 5-Gap 80 MHz IH Cavities**
Author: Margarita Bulgacheva, Mariya Gusarova (MEPhI, Moscow)

TUPOMS051 **Prototype Fabrication of an Active Normal Conducting Third Harmonic Cavity for the ALBA Storage Ring**
Author: Jesus Ramon Ocampo, Jose Maria Alvarez, Beatriz Bravo, Francis Perez, Angela Salom, Pol Solans (ALBA-CELLS Synchrotron, Cerdanyola del Vallès)

TUPOMS052 **Considerations From Deploying, Commissioning, and Maintaining the Control System for LCLS-II Undulators**
Author: Maria Alessandra Montironi, Cory Andrews, Gabriel Marcus, Heinz-Dieter Nuhn (SLAC, Menlo Park, California)

TUPOMS053 **Start-to-End Simulations of the LCLS-II HE Free Electron Laser**

Author: David Cesar, Gabriel Marcus, Heinz-Dieter Nuhn, Tor Raubenheimer (SLAC, Menlo Park, California), Ji Qiang (LBNL, Berkeley, California)

TUPOMS054 **Data Augmentation for Machine Learning Predictions of RF Breakdowns in CLIC Accelerating Structures**

Author: Holger Severin Bovbjerg (Aalborg University, Aalborg; CERN, Geneva), Ming Shen, Zheng-Hua Tan (Aalborg University, Aalborg), Andrea Apollonio, Thomas Cartier-Michaud, William Lee Millar, Daniel Wollmann (CERN, Geneva), Christoph Obermair (CERN, Geneva; TUG, Graz)

TUPOMS055 **A Modernized Architecture for the Post Mortem System at CERN**

Author: Jonas Fridolin Barth, Filip Bogyai, Jean-Christophe Garnier, Marcin Lukasz Majewski, Tiago Martins Ribeiro, Aleksandra Mnich, Maciej Piotr Pocwierz, Robert Selvek, Robert Simpson, Anita Stanisz, Daniel Wollmann (CERN, Geneva), Markus Zerlauth (CERN, Meyrin)

TUPOMS056 **C-Band Test Stand Development at LANL; The C-Band Engineering Research Facility (CERF-NM)**

Author: Mark Erwin Middendorf, Dmitry Gorelov, Mitchell E Schneider, Evgenya I. Simakov, Muhammed Rashedul Alam Zuboraj (LANL, Los Alamos, New Mexico), Sandra Biedron (UNM-ME, Albuquerque, New Mexico)

TUPOMS057 **Design Study of HOM Couplers for the C-Band Accelerating Structure**

Author: Dongsung Kim, Evgenya I. Simakov (LANL, Los Alamos, New Mexico), Zenghai Li (SLAC, Menlo Park, California), Sandra Biedron (UNM-ECE, Albuquerque)

TUPOMS058 **C-Band High Gradient Testing of the Benchmark a/l=0.105 Cavity**

Author: Evgenya I. Simakov, Dmitry Gorelov, Tsuyoshi Tajima, Muhammed Rashed-ul Alam Zuboraj (LANL, Los Alamos, New Mexico), Sandra Biedron (Element Aero, Chicago; UNM-ECE, Albuquerque), Mark Erwin Middendorf (ORNL RAD, Oak Ridge, Tennessee)

TUPOMS059 **Mechanistic Simulations of Material Evolution Under Electric Fields**

Author: Soumendu Bagchi, Danny Perez (LANL, Los Alamos, New Mexico), Sandra Biedron (UNM-ME, Albuquerque, New Mexico)

TUPOMS060 **High Gradient Conditioning and Performance of C-Band ß=0.5 Proton Normal- Conducting Copper and Copper-Silver Radio-Frequency Accelerating Cavities**

Author: Muhammed Rashedul Alam Zuboraj, Ryan Lee Fleming, Dmitry Gorelov, John Wesley Lewellen, Mark Erwin Middendorf, Evgenya I. Simakov (LANL, Los Alamos, New Mexico), Emily Jevarjian (MSU, East Lansing, Michigan), Sergey Baryshev, Mitchell E Schneider (Michigan State University, East Lansing, Michigan), Valery Dolgashev, Emilio Alessandro Nanni, Emma Snively, Sami Tantawi (SLAC, Menlo Park, California)

TUPOMS061 **RF System Design for Elettra 2.0**

Author: Cristina Pasotti, Mauro Bocciai, Luca Bortolossi, Mauro Rinaldi (Elettra-Sincrotrone Trieste S.C.p.A., Basovizza)

TUPOMS062 **Overall Performances of 26 Power Stations at 400 kW - 352 MHz**

Author: Cristina Pasotti, Alessandro Cuttin (Elettra-Sincrotrone Trieste S.C.p.A., Basovizza)

Wed, June 15, 2022

Jun 15, 2022 09:00 - 09:30 Oral Session Grand Diamond Ballroom

WEIXGD - Invited Orals: Circular and Linear Colliders

WEIXGD1 **EIC Beam Dynamics Challenges**
Author: Derong Xu, Ferdinand J. Willeke (BNL, Upton, New York)

Jun 15, 2022 09:30 - 10:30 Oral Session Grand Diamond Ballroom

WEOXGD - Contributed Orals: Circular and Linear Colliders

WEOXGD1 **Studies and Mitigation of Collective Effects in FCC-ee**
Author: Mauro Migliorati (Sapienza University of Rome, Rome), Emanuela Carideo (CERN, Geneva; Sapienza University of Rome, Roma), Chiara Antuono (CERN, Meyrin), Yuan Zhang (IHEP, Beijing), Mostafa Behtouei, Bruno Spataro, Mikhail Zobov (LNF-INFN, Frascati)

WEOXGD2 **Electron Ion Collider Lattice Design for LHeC With Permanent Magnets**
Author: Dejan Trbojevic, J. Scott Berg, Stephen Brooks (BNL, Upton, New York), Georg H. Hoffstaetter (Cornell University (CLASSE), Ithaca, New York), Alex Bogacz (JLab, Newport News, Virginia)

WEOXGD3 **An Alternative Design for BEPCII Upgrade**
Author: Huiping Geng, Jun Xing, Chenghui Yu, Yuan Zhang (IHEP, Beijing)

Jun 15, 2022 09:00 - 09:30 Oral Session Sapphire 204-205

WEIXSP - Invited Orals: Novel Particle Sources and Acceleration Techniques

WEIXSP1 **Towards High-Repetition Rate Petawatt Laser Experiments With Cryogenic Jets Using a Mechanical Chopper System**
Author: Martin Rehwald, Stefan Assenbaum, Constantin Bernert, Ulrich Schramm, Karl Zeil (HZDR, Dresden), Sebastian Goede (EuXFEL, Schenefeld), Chandra Breanne Curry, Maxence Gauthier, Siegfried Glenzer, Christopher schoenwaelder, Franziska Treffert (SLAC, Menlo Park, California)

Jun 15, 2022 09:30 - 10:30 Oral Session Sapphire 204-205

WEOXSP - Contributed Orals: Novel Particle Sources and Acceleration Techniques

WEOXSP1 **Proposal for a Compact Neutron Generator Based on a Negative Deuterium Ion Beam**
Author: Kouichi Jimbo, Toshiyuki Shirai (QST-NIRS, Chiba), Ka-Ngo Leung (LBNL, Berkeley, California), Karl Albert Van Bibber (UCB, Berkeley, California)

WEOXSP2 **Progress in Multi-MeV Energy Gain in a Relativistic Dielectric Laser Accelerator**
Author: Sophie Crisp, Alexander Ody (UCLA, Los Angeles), Pietro Musumeci (UCLA, Los Angeles, California)

WEOXSP3 **mm-Wave Structure Development for High Gradient Acceleration**
Author: Emma Snively, Emilio Alessandro Nanni, Mohamed Othman, Ann Sy (SLAC, Menlo Park, California), Annika Gabriel (SLAC, Menlo Park, California; UCSC, Santa Cruz, California)

Jun 15, 2022 11:00 - 11:30 Oral Session Grand Diamond Ballroom

WEIYGD - Invited Orals: Hadron Accelerators

WEIYGD1 **Achievements and Performance Prospects of the Upgraded LHC Injectors**
Author: Verena Kain, Fanouria Antoniou, Nicolo Biancacci, Etienne Carlier, Brennan Goddard, Ivan Karpov, Thomas Edward Levens, Malika Meddahi, Lotta Mether, Eric Montesinos, Tirsi Prebibaj, Elisabeth Renner, Federico Roncarolo, Giovanni Rumolo, Benoit Salvant, Michael Schenk, Richard Scrivens, Piotr Krzysztof Skowronski, Frank Tecker, Francesco Maria Velotti, Rolf Wegner (CERN, Meyrin), Reyes Alemany-Fernandez, Theodoros Argyropoulos, Foteini Asvesta, Hannes Bartosik, Philippe Baudrenghien, Giulia Bellodi, Denis Gerard Cotte, Julie Coupard, Gian Piero Di Giovanni, Alan Findlay, Anne Funken, Klaus Hanke, Alexander Huschauer, Toke Koevener, Detlef Kuchler, Jean-Baptiste Lallement, Kevin Shing Bruce Li, Alessandra Maria Lombardi, Nico Madysa, Edgar Mahner, Bettina Mikulec, David Nisbet, Francois-Xavier Nuiry, Konstantinos Paraschou, Fernando Pedrosa, Sylvie Prodon, Elena Shaposhnikova, Arthur Spierer, Carlo Zannini (CERN, Geneva), Simon Christopher Paul Albright, Bruno Balhan, Michael John Barnes, Andrea Boccardi, Jan Borburgh, Chiara Bracco, Heiko Damerau, Matthew Alexander Fraser, Gregoire Hagmann, Alexandre Lasheen, Giulia Papotti, Daniel Valuch (CERN, Geneva 23)

Jun 15, 2022 11:30 - 12:30 Oral Session Grand Diamond Ballroom

WEOYGD - Contributed Orals: Hadron Accelerators

WEOYGD1 **Recent Results of Beam Loss Mitigation and Extremely Low Beam Loss Operation of J-PARC RCS**
Author: Pranab Kumar Saha, Hiroyuki Harada, Takamitsu Nakanoya, Kota Okabe, Hidefumi Okita, Yoshihiro Shobuda, Fumihiko Tamura, Masahiro Yoshimoto (JAEA/J-PARC, Tokai-Mura, Naka-Gun, Ibaraki-Ken), Hideaki Hotchi (KEK, Tokai, Ibaraki)

WEOYGD2 **Results of the Coherent Electron Cooling Experiment at RHIC**
Author: Vladimir N. Litvinenko (Stony Brook University, Stony Brook), Zeynep Altinbas, Stephen Brooks, Jean Clifford Brutus, Zachary Alan Conway, Luca Cultrera, Anthony Curcio, Leonard DeSanto, Anthony Di Lieto, Kirsten Angelika Drees, Wolfram Fischer, Mengjia Gaowei, Xiaofeng Gu, Margaret Harvey, Thomas Hayes, Haixin Huang, Matthew Ilardo, Patrick Inacker, James Jamilkowski, Yichao Jing, Prerana Kankiya, Robert Karl, Dmitry Kayran, Jorg Kewisch, Jun Ma, George Mahler, Gregory James Marr, Al Marusic, Robert Michnoff, Michiko Minty, Geetha Narayan, Linh Nguyen, Matthew Paniccia, Igor Pinayev, Triveni Rao, Guillaume Robert-Demolaize, Thomas Roser, Paul William Sampson, Jon Sandberg, Medani Prasad Sangroula, Vincent Schoefer, Sergei Seletskiy, Freddy Severino, Travis Shrey, John Skaritka, Loralie Smart, Andrei Sukhanov, Roberto Than, Peter Thieberger, Nicholaos Tsoupas, Joseph Tuozzolo, Erdong Wang, Gang Wang, Daniel Weiss, Binping Xiao, Alex Zaltsman (BNL, Upton, New York), Irina Petrushina (SUNY SB, Stony Brook, New York)

WEOYGD3 **Isochronous Mode of the Experimental Storage Ring (ESR) at GSI**
Author: Sergey Litvinov, Regina Hess, Bernd Lorentz, Markus Steck (GSI, Darmstadt)

Jun 15, 2022 11:00 - 11:30 Oral Session Sapphire 204-205

WEIYSP - Invited Orals: Photon Sources and Electron Accelerators

WEIYSP1 **New Designs of Short-Period Undulators for Producing High-Brightness Radiation in Synchrotron Light Sources**
Author: Erik Jan Wallén (LBNL, Berkeley, California), Yury Ivanyushenkov (ANL, Lemont, Illinois), Toshiya Tanabe (BNL, Upton, New York)

Jun 15, 2022 11:30 - 12:30 Oral Session Sapphire 204-205

WEOYSP - Contributed Orals: Photon Sources and Electron Accelerators

WEOYSP1 **Experiments With Undulator Radiation, Emitted by a Single Electron**
Author: Ihar Lobach (ANL, Lemont, Illinois), Sergei Nagaitsev, Alexander Leonidovich Romanov, Alexander V. Shemyakin, Giulio Stancari (Fermilab, Batavia, Illinois)

WEOYSP2 **First Electron Beam of ThomX Project**
Author: Christelle Bruni, Muath Alkadi, Jean-Noël Cayla, Iryna Chaikovska, Sophie Chancé, Vincent Chaumat, Olivier Dalifard, Nicolas Delerue, Kevin Dupraz, Mohamed El Khaldi, Noureddine ElKamchi, Ezgi Ergenlik, Philippe Gauron, Alexandre Gonnin, Emmanuel Goutierre, Hayg Guler, Marie Jacquet, Viacheslav Kubytskyi, Pierre Lepercq, Frederic Letellier-Cohen, Jean Claude Marrucho, Bruno Mercier, Eric Mistretta, Hugues Monard, Alexandre Moutardier, Maher Omeich, V. Soskov, Francois Wicek (Université Paris-Saclay, CNRS/IN2P3, IJCLab, Orsay)

WEOYSP3 **Operation Experience with SESAME RF System**
Author: Darweesh S.D Foudeh, Alaa Izzat Kurdi, Nashat Khaled Sawai (SESAME, Allan)

Jun 15, 2022 14:00 - 14:40 Oral Session Grand Diamond Ballroom

WEOZGD - Contributed Orals: Novel Particle Sources and Acceleration Techniques

WEOZGD1 **Design of an LPA-Based First-Stage Injector for a Synchrotron Light Source**
Author: Xueyan Shi, Haisheng Xu (IHEP, Beijing)

WEOZGD2 **Status and Prospects for the Plasma-Driven Attosecond X-Ray (PAX) Experiment at FACET-II**
Author: Claudio Emma, Rafi Mir-Ali Hessami, Kirk Larsen, Agostino Marinelli, River Robles (SLAC, Menlo Park, California)

Jun 15, 2022 14:40 - 16:40 Oral Session Grand Diamond Ballroom

WEINGD - Industry Session

Jun 15, 2022 14:00 - 15:00 Oral Session Sapphire 204-205

WEIZSP - Invited Orals: Beam Dynamics and EM Fields

WEIZSP1 **Interpretation of Particle Motion in a Circular Accelerator as Diffraction of Light**
Author: Claudio Emma, Rafi Mir-Ali Hessami, Kirk Larsen, Agostino Marinelli, River Robles (SLAC, Menlo Park, California)

WEIZSP2 **Trapping of Neutral Molecules by the Electromagnetic Beam Field**
Author: Giuliano Franchetti (GSI, Darmstadt), Frank Zimmermann (CERN, Meyrin)

Jun 15, 2022 15:00 - 16:20 Oral Session Sapphire 204-205

WEOZSP - Contributed Orals: Beam Dynamics and EM Fields

WEOZSP1 **Longitudinal Bunch Shaping Using an X-Band Transverse Deflecting Cavity Powered by Wakefield Power Extractor at Argonne Wakefield Accelerator Facility**
Author: Seongyeol Kim, Gongxiaohui Chen, Darrell Scott Doran, Wanming Liu, John Gorham Power, Eric Edson Wisniewski (ANL, Lemont, Illinois), Alexis Bibian, Chunguang Jing, Ernest William Knight, Sergey Vladimirovich Kuzikov (Euclid TechLabs, Solon, Ohio), Philippe Regis-Guy Piot (Northern Illinois University, DeKalb, Illinois)

WEOZSP2 **Investigating the Suppression of the Crab Cavity Noise Induced Emittance Growth From the Transverse Beam Impedance**
Author: Natalia Triantafyllou, Andrzej Wolski (The University of Liverpool, Liverpool), Fanouria Antoniou, Hannes Bartosik, Philippe Baudrenghien, Xavier Buffat, Rama Calaga, Yannis Papaphilippou (CERN, Meyrin), Themis Mastoridis (CalPoly, San Luis Obispo, California)

WEOZSP3 **Measurements of Radiation Fields From a Ceramic Break.**
Author: Yoshihiro Shobuda (JAEA/J-PARC, Tokai-Mura, Naka-Gun, Ibaraki-Ken), Shuichiro Hatakeyama, Masahiro Yoshimoto (JAEA/J-PARC, Tokai-mura), Takeshi Toyama (KEK, Tokai, Ibaraki)

WEOZSP4 **Full Coupling Studies for ALBA-II**
Author: Zeus Martí, Gabriele Benedetti, Michele Carlà, Ubaldo Iriso, Laura Torino (ALBA-CELLS Synchrotron, Cerdanyola del Vallès)

Jun 15, 2022 16:20 - 18:20	Poster Session	Poster Area Somtum

WEPOST - Poster Session - Somtam

WEPOST001 **Radiation Load Studies for Superconducting Magnets in a 10 TeV Muon Collider**
Author: Daniele Calzolari, Francesc Salvat Pujol (CERN, Geneva 23), Christian Carli, Kyriacos Skoufaris (CERN, Geneva), Anton Lechner, Giuseppe Lerner, Daniel Schulte (CERN, Meyrin), Barbara Humann (TU Vienna, Wien; CERN, Meyrin)

WEPOST002 **Synchrotron Radiation Impact on the FCC-EE Arcs**
Author: Barbara Humann (TU Vienna, Wien; CERN, Meyrin), Roberto Kersevan (CERN, Geneva), Francesco Cerutti (CERN, Meyrin)

WEPOST003 **Implications of the Upgrade II of LHCb on the Insertion Region 8: From Energy Deposition Studies to Mitigation Strategies**
Author: Alessia Ciccotelli (The University of Manchester, Manchester; CERN, Geneva 23), Francois Butin, Francesco Cerutti, Luigi Salvatore Esposito, Maud Wehrle (CERN, Meyrin), Barbara Humann (CERN, Meyrin; TU Vienna, Wien), Robert Appleby (UMAN, Manchester)

WEPOST006 **Cold Short Straight Sections for FCC-ee**
Author: Michael Koratzinos (MIT, Cambridge, Massachusetts), Jacqueline Keintzel (CERN, Geneva)

WEPOST007 **Centre-of-Mass Energy in FCC-ee**
Author: Jacqueline Keintzel, Rogelio Tomas, Frank Zimmermann (CERN, Geneva), Dmitry Shatilov (BINP SB RAS, Novosibirsk), Alain Paul Blondel (DPNC, Genève)

WEPOST008 **LHC Run 3 Optics Commissioning**
Author: Tobias Hakan Bjorn Persson, Joschua Dilly, Hector Garcia Morales, Michael Hofer, Eirik Jaccheri Hoydalsvik, Jacqueline Keintzel, Ewen Hamish Maclean, Lukas Malina, Felix Soubelet, Rogelio Tomas, Andreas Wegscheider (CERN, Geneva), Elena Fol, Léon van Riesen-Haupt (CERN, Meyrin), Javier Fernando Cardona (UNAL, Bogota D.C)

WEPOST009 **Muon Collider Based on Gamma Factory, FCC-ee and Plasma Target**
Author: Frank Zimmermann, Andrea Latina (CERN, Geneva), Alain Paul Blondel (DPNC, Genève), Mario Antonelli, Manuela Boscolo (LNF-INFN, Frascati), John Patrick Farmer (MPI-P, München)

WEPOST010 **Controlling e+/e- Circular Collider Bunch Intensity by Laser Compton Scattering**
Author: Frank Zimmermann (CERN, Geneva), Tor Raubenheimer (SLAC, Menlo Park, California)

WEPOST011 **Studies on Top-Up Injection Into the FCC-ee Collider Ring**
Author: Patrick James Hunchak (CLS, Saskatoon, Saskatchewan), Michael Hofer (CERN, Geneva), Yann Dutheil (CERN, Geneva 23), Rebecca Ramjiawan, Frank Zimmermann (CERN, Meyrin), Mark James Boland (CLS, Saskatoon, Saskatchewan; University of Saskatchewan, Saskatoon), Masamitsu Aiba (PSI, Villigen PSI)

WEPOST012 **Feasibility of Slow-Extracted High-Energy Ions From the CERN PS for CHARM**
Author: Matthew Alexander Fraser, Natalia Emriskova, Ana Guerrero, Eliott Philippe Johnson, Daniel Prelipcean (CERN, Geneva 23), Kacper Bilko, Nikolaos Charitonidis, Salvatore Danzeca, Marc Delrieux, Michel Duraffourg, Oliver Hans, Gil Imesch, Federico Ravotti, Federico Roncarolo (CERN, Geneva), Luigi Salvatore Esposito, Ruben Garcia Alia, Giuseppe Lerner, Inaki Ortega Ruiz, Giuseppe Pezzullo, Andreas Waets (CERN, Meyrin)

WEPOST013 **Exploitation of Crystal Shadowing via Multi-Crystal Array, Optimisers and Reinforcement Learning**
Author: Francesco Maria Velotti, Mario Di Castro, Luigi Salvatore Esposito, Matthew Alexander Fraser, Simone Silvano Gilardoni, Brennan Goddard, Verena Kain, Eloise Matheson (CERN, Meyrin)

WEPOST014 **Studies on Pre-Computation of SPS-to-LHC Transfer Line Corrections**
Author: Chiara Bracco (CERN, Geneva), Francesco Maria Velotti (CERN, Meyrin)

WEPOST015 **Implementation of a Tune Sweep Slow Extraction With Constant Optics at MedAustron**
Author: Pablo Andreas Arrutia Sota, Brennan Goddard, Verena Kain, Francesco Maria Velotti (CERN, Meyrin), Matthew Alexander Fraser (CERN, Geneva 23), Florian Kuehteubl, Mauro Torino Francesco Pivi, Dale Prokopovich (EBG MedAustron, Wr. Neustadt), Philip Burrows (JAI, Oxford), Andrea De Franco (QST, Aomori)

WEPOST016 **Development of Collimation Simulations for the FCC-ee**
Author: Andrey Abramov, Roderik Bruce, Michael Hofer, Giovanni Iadarola, Stefano Redaelli (CERN, Geneva), Felix Carlier, Tatiana Pieloni, Milica Rakic (EPFL, Lausanne), Simon Mathieu White (ESRF, Grenoble), Laurence James Nevay (JAI, Egham, Surrey)

WEPOST017 **Design of a Collimation Section for the FCC-ee**
Author: Michael Hofer, Roderik Bruce (CERN, Geneva), Andrey Abramov, Frank Zimmermann (CERN, Meyrin), Katsunobu Oide (CERN, Meyrin; KEK, Ibaraki), Maitreyee Moudgalya, Tatiana Pieloni (EPFL, Lausanne)

WEPOST018 **Power Deposition Studies for Crystal-Based Heavy Ion Collimation in the LHC**
Author: Jean-Baptiste Potoine, Luigi Salvatore Esposito, Anton Lechner, Andreas Waets (CERN, Meyrin), Roderik Bruce, Rongrong Cai, Pascal Dominik Hermes, Stefano Redaelli (CERN, Geneva), Frederic Wrobel (IES, Montpellier)

WEPOST019 **Benchmarks of Energy Deposition Studies for Heavy-Ion Collimation Losses at the LHC**
Author: Jean-Baptiste Potoine, Anton Lechner, Andreas Waets (CERN, Meyrin), Roderik Bruce, Rongrong Cai, Pascal Dominik Hermes, Stefano Redaelli (CERN, Geneva), Frederic Wrobel (IES, Montpellier)

WEPOST020 **EIC Hadron Spin Rotators**
Author: Vadim Ptitsyn, J. Scott Berg (BNL, Upton, New York)

WEPOST021 **Theoretical Study of Laser Energy Absorption Towards Novel Bright Proton and Electron Sources**
Author: Iuliana Mariana Vladisavlevici, Emmanuel d'Humières (CELIA, Talence), Daniel Vizman (West University of Timisoara, Timisoara)

WEPOST023 **Development of a New Low Energy Beamline for the NA61/SHINE Experiment**
Author: Carlo Alberto Mussolini (CERN, Geneva; JAI, Oxford; Oxford University, Oxford, Oxon), Nikolaos Charitonidis (CERN, Geneva), Eric Zimmerman (CIPS, Boulder, Colorado), Yoshikazu Nagai (Colorado University at Boulder, Boulder, Colorado), Philip Burrows (JAI, Oxford; Oxford University, Oxford, Oxon)

WEPOST024 **Developing Beam Options for Future Fixed Target Experiments in the CERN North Area Within the Framework of of the Conventional Beams Working Group of Physics Beyond Colliders**
Author: Carlo Alberto Mussolini (CERN, Geneva; JAI, Oxford; Oxford University, Oxford, Oxon), Dipanwita Banerjee, Anna Baratto Roldan, Johannes Bernhard, Nikolaos Charitonidis, Gian Luigi D'Alessandro, Alexander Gerbershagen, Bastien Rae, Silvia Schuh-Erhard, Maarten Willibrord Uriël Van Dijk (CERN, Geneva), Fabian Metzger (CERN, Geneva; HISKP, Bonn), Elisabetta Giulia Parozzi (CERN, Geneva; INFN MIB, MILANO; Universita Milano Bicocca, MILANO), Florian Wolfgang Stummer (CERN, Geneva; JAI, Egham, Surrey; Royal Holloway, University of London, Surrey), Robert Peter Murphy (CERN, Geneva; Royal Holloway, University of London, Surrey), Markus Brugger (CERN, Meyrin)

WEPOST025 **A High Power Prototype of a Harmonic Kicker Cavity**
Author: Gunn-Tae Park, Jiquan Guo, Robert Rimmer, Haipeng Wang, Scott Williams (JLab, Newport News, Virginia), Sarah Ann Overstreet (ODU, Norfolk, Virginia)

WEPOST026 **Conceptual Design of the FCC-ee Beam Dumping System**
Author: Alexander Michael Krainer, Marco Calviani, Anton Lechner, Antonio Perillo-Marcone (CERN, Meyrin), Yann Dutheil, Francois-Xavier Nuiry (CERN, Geneva), Pablo Andreu Muñoz, Wolfgang Bartmann (CERN, Geneva 23), Rebecca Ramjiawan (JAI, Oxford)

WEPOST027 **Stable Multi-Day Performance and Diagnosis of the DRACO Laser Wakefield Accelerator for Secondary Applications**
Author: Jurjen Pieter Couperus Cabadag, Stefan Bock, Yen-Yu Chang, Alexander Debus, Rene Gebhardt, Uwe Helbig, Arie Irman, Alexander Koehler, Thomas Kurz, Richard Guntram Pausch, Thomas Püschel, Susanne Schoebel, Patrick Ufer, Omid Zarini, Karl Zeil (HZDR, Dresden), Alex Lumpkin (Fermilab, Batavia, Illinois), Ulrich Schramm (HZDR, Dresden; TU Dresden, Dresden), Amin Ghaith (SOLEIL, Gif-sur-Yvette), Brant Benjamin Bowers, Michael Downer, Andrea Hannasch, Maxwell LaBerge (The University of Texas at Austin, Austin, Texas)

WEPOST028 **Gas-Dynamic Density Downramp Injection in a Beam-Driven Plasma Wakefield Accelerator**
Author: Jurjen Pieter Couperus Cabadag, Yen-Yu Chang, Alexander Debus, Arie Irman, Alexander Koehler, Thomas Kurz, Richard Guntram Pausch, Susanne Schoebel, Klaus Steiniger, Patrick Ufer, Karl Zeil (HZDR, Dresden), Bernhard Hidding (Cockcroft Institute, Warrington, Cheshire; USTRAT/SUPA, Glasgow), Alberto Martinez de la Ossa (DESY, Hamburg), Michael Hans Bussmann (HZDR, Dresden; CASUS, Görlitz), Ulrich Schramm (HZDR, Dresden; Technische Universitaet Dresden, Dresden), Andreas Döpp, Moritz Foerster, Florian Haberstroh (LMU, Garching), Stefan Karsch (LMU, Garching; MPQ, Garching, Munich), Sebastien Corde, Max Gilljohann, Alexander Knetsch, Olena Kononenko (LOA, Palaiseau), Alastair Nutter, Gaurav Raj (USTRAT/SUPA, Glasgow), Thomas Heinemann (USTRAT/SUPA, Glasgow; Cockcroft Institute, Warrington, Cheshire; DESY, Hamburg)

WEPOST029 **First Start-to-End Simulations of the 6 GeV Laser-Plasma Injector at DESY**
Author: Sergey A. Antipov, Ilya Agapov, Reinhard Brinkmann, Ángel Ferran Pousa, Marc Andre Jebramcik, Alberto Martinez de la Ossa, Maxence Thévenet (DESY, Hamburg)

WEPOST030 **Optimizing Laser-Plasma Accelerator Designs With Bayesian Algorithms Learning From Simulation Codes at Different Levels of Fidelities**
Author: Ángel Ferran Pousa, Manuel Kirchen, Alberto Martinez de la Ossa, Maxence Thévenet (DESY, Hamburg), Stephen Hudson, Jeffrey Larson (ANL, Lemont, Illinois), Axel Huebl (LBNL, Berkeley), Remi Lehe, Jean-Luc Vay (LBNL, Berkeley, California), Sören Jalas (University of Hamburg, Hamburg)

WEPOST031 **RHIC Polarized Proton Operation in Run 22**
Author: Vincent Schoefer, Elke Caroline Aschenauer, Donald Bruno, Kirsten Angelika Drees, Wolfram Fischer, Chris J. Gardner, Kiel Hock, Haixin Huang, Robert Hulsart, Chuyu Liu, Yun Luo, Gregory James Marr, Al Marusic, Francois Meot, Kevin Mernick, Robert Michnoff, Michiko Minty, John Morris, Andrei Poblaguev, Salvatore Polizzo, Vadim Ptitsyn, Vahid Houston Ranjbar, Deepak Raparia, Guillaume Robert-Demolaize, Jon Sandberg, William Bernard Schmidke, Freddy Severino, Travis Shrey, Peter Thieberger, Joseph Tuozzolo, Kin Yip, Alex Zaltsman, Anatoli Zelenski, Keith Zeno (BNL, Upton, New York)

WEPOST032 **Status Report of the 50 MeV LPA-Based Injector at ATHENA for a Compact Storage Ring**
Author: Eva Panofski, Cora Braun, Julian Dirkwinkel, Juan Bautista Gonzalez, Thomas Huelsenbusch, Andreas R. Maier, Jens Osterhoff, Guido Palmer, Paul Andreas Walker, Paul Viktor Winkler (DESY, Hamburg), Malte Kaluza, Alexander Saevert (HIJ, Jena), Erik Bruendermann, Bastian Haerer, Anke-Susanne Mueller, Alexander Ivanovich Papash, Christina Widmann (KIT, Karlsruhe), Timo Felix Johannes Eichner, Lars Hübner, Sören Jalas, Laurids Jeppe, Manuel Kirchen, Philipp Messner, Matthias Schnepp, Maximilian Trunk, Christian Markus Werle (University of Hamburg, Hamburg)

WEPOST033 **FLASHForward: A Facility for High-Quality, High-Repetition-Rate Plasma-Wakefield Research**
Author: Sarah Schroeder, Judita Beinortaite, Jonas Björklund Svensson, Simon Bohlen, Gregory Boyle, Richard D'Arcy, Severin Diederichs, James Matthew Garland, Julian Hörsch, Advait Laxmidas Kanekar, Carl Andreas Lindstrøm, Gregor Loisch, Steven Mathis Mewes, Jens Osterhoff, Felipe Peña Asmus, Adam Scaachi, Bridget Sheeran, Maxence Thévenet, Stephan Wesch, Jonathan Wood (DESY, Hamburg), Lewis Anthony Boulton (Cockcroft Institute, Warrington, Cheshire; DESY, Hamburg; USTRAT/SUPA, Glasgow), Matthew Wing (DESY, Hamburg; UCL, London), Pau Gonzalez-Caminal (DESY, Hamburg; Universität Hamburg, Hamburg), Brian Foster (Oxford University, Oxford, Oxon), James Chappell (UCL, London)

WEPOST034 **Magnetic Characterization of a Superconducting Transverse Gradient Undulator for Compact Laser Wakefield Accelerator-Driven FEL**
Author: Kantaphon Damminsek, Axel Bernhard, Hyuk Jin Cha, Anke-Susanne Mueller, Maisui Ning, Yimin Tong (KIT, Karlsruhe), Sebastian C. Richter (CERN, Geneva), Robert Rossmanith (DESY, Hamburg), Andreas Wolfgang Grau (KIT, Eggenstein-Leopoldshafen)

WEPOST035 **Electron Temperature Measurements in a Hydrogen-Filled Capillary**
Author: Sahar Arjmand, Lucio Crincoli, Donato Pellegrini (INFN/LNF, Frascati), Mario Del Franco (ENEA C.R. Frascati, Frascati (Roma)), Maria Pia Anania, Angelo Biagioni, Gemma Costa, Massimo Ferrario, Mario Galletti, Valerio Lollo, Riccardo Pompili (LNF-INFN, Frascati), Arie Zigler (The Hebrew University of Jerusalem, Jerusalem), Danilo Giulietti (UNIPI, Pisa)

WEPOST036 **The Propagation of Laser Accelerated Pulsed Beams in Underdense Plasma**
Author: Hao Cheng, Dongyu Li, Yuze Li, Chen Lin, Xueqing Yan, Yang Yan, Tong Yang (PKU, Beijing)

WEPOST037 **Laser-Plasma Accelerator Using External Injection From Photocathode RF GUN for Compact Free Electron Lasers.**
Author: Inhyuk Nam, Moo-Hyun Cho, Seong Hoon Jung, Changbum Kim, Minseok Kim, Chang-Ki Min (PAL, Pohang)

WEPOST039 **Mapping Charge Capture and Acceleration in a Plasma Wakefield of a Proton Bunch Using Variable Emittance Electron Beam Injection**
Author: Eduardo Granados, Eric Chevallay, Steffen Doebert, Valentin N. Fedosseev, Florence Friebel, Edda Gschwendtner, Marlene Turner, Livio Verra (CERN, Meyrin), Spencer Jake Gessner, Stefano Mazzoni (CERN, Geneva), Anna-Maria Bachmann (MPI, Muenchen), Joshua Timothy Moody (MPI-P, München)

WEPOST040 **PEDRO Analysis**
Author: Maanas Hemanth Oruganti, Brian Naranjo, James Rosenzweig, Monika Yadav (UCLA, Los Angeles, California)

WEPOST041 **Physical Aspects of Collinear Laser Injection at SLAC FACET-II ¿E-310: Trojan Horse Experiment**
Author: Monika Yadav, Oznur Apsimon, Carsten Peter Welsch (The University of Liverpool, Liverpool), Claire Evangeline Hansel (UCLA, Los Angeles), Gerard Andonian, Pratik Manwani, Brian Naranjo, James Rosenzweig (UCLA, Los Angeles, California), Bernhard Hidding (USTRAT/SUPA, Glasgow)

WEPOST042 **Radiation Diagnostics for AWA and FACET Flat Beams in Plasma**
Author: Monika Yadav, Oznur Apsimon, Carsten Peter Welsch (The University of Liverpool, Liverpool), Aliaksei Halavanau (SLAC, Menlo Park, California), Havyn Skyler Ancelin, Gerard Andonian, Nathan Majernik, Pratik Manwani, Brian Naranjo, James Rosenzweig (UCLA, Los Angeles, California)

WEPOST043 **TV/m Laser-Driven Accelerating Gradients in Graphene**
Author: Cristian Bontoiu, Oznur Apsimon, Egidijus Kukstas, Carsten Peter Welsch, Monika Yadav (The University of Liverpool, Liverpool), Javier Resta-Lopez (ICMUV, Paterna), Guoxing Xia (UMAN, Manchester), Alexandre Bonatto (Universidade Federal de Ciências da Saúde de Porto Alegre, Porto Alegre)

WEPOST045 **Simulating enhanced focusing effects of ion motion in adiabatic plasmas**
Author: Derek Rundle Chow, Claire Evangeline Hansel (UCLA, Los Angeles), Oznur Apsimon, Carsten Peter Welsch (The University of Liverpool, Liverpool), Pratik Manwani, James Rosenzweig, Monika Yadav (UCLA, Los Angeles, California)

WEPOST046 **Beam Matching in an Elliptical Plasma Blowout Driven by Highly Asymmetric Flat Beams**
Author: Pratik Manwani, Havyn Skyler Ancelin, Nathan Majernik, James Rosenzweig (UCLA, Los Angeles, California), Monika Yadav (Cockcroft Institute, Warrington, Cheshire; The University of Liverpool, Liverpool; UCLA, Los Angeles, California), Gerard Andonian (RadiaBeam, Marina del Rey, California; UCLA, Los Angeles, California)

WEPOST048 **Excitation of Very High Gradient Plasma Wakefields From Nanometer Scale Beams**
Author: Pratik Manwani, Havyn Skyler Ancelin, Nathan Majernik, James Rosenzweig (UCLA, Los Angeles, California), Monika Yadav (Cockcroft Institute, Warrington, Cheshire; The University of Liverpool, Liverpool; UCLA, Los Angeles, California), Gerard Andonian (RadiaBeam, Marina del Rey, California; UCLA, Los Angeles, California), River Robles (SLAC, Menlo Park, California), Derek Rundle Chow (UCLA, Los Angeles)

WEPOST050 **Further Measurements of Beam-Beam Interactions in a Gear-Changing System in DESIREE**
Author: Edith Anne Nissen (JLab, Newport News, Virginia), Anders Källberg, Ansgar Simonsson (Stockholm University, Stockholm)

WEPOST052 **Influence of Plasma Electrode Aperture Size on Beam Emittance From a Multicusp Ion Source**
Author: Anand Mathai George, Morgan Patrick Dehnel, Stephane Melanson, Justine Joyce Munich (D-Pace, Nelson, British Columbia), Neil Broderick (University of Auckland, Auckland)

WEPOST053 **Extraction of High-Charge State Argon and alpha-particles from D-Pace Penning Ion Source Test Stand**
Author: Nicolas Savard (UBC, Vancouver, B.C.), Morgan Patrick Dehnel, Justine Joyce Munich (D-Pace, Nelson, British Columbia)

WEPOST054 **ELIMAIA , a Laser-Plasma Accelerator Beamline: Overview of the Technology Available for Users and Recent Commissioning Results**
Author: Francesco Schillaci, Timofej Chagovets, Lorenzo Giuffrida, Filip Grepl, Martina Greplova Zakova, Valeriia Istokskaia, Daniele Margarone, Jan Psikal, Stanislav Stancek, Marco Tosca, Maksym Tryus (ELI-BEAMS, Prague), Tadzio Levato, Andriy Velyhan (Czech Republic Academy of Sciences, Prague), Giuseppe A. Pablo Cirrone, Giada Petringa (INFN/LNS, Catania)

WEPOST055 **An Energy Dechirper for Laser-Accelerated Proton Based on Standing Wave Wakefield Superposition**
Author: Tong Yang, Hao Cheng, Yanlv Fang, Zhen Guo, Dongyu Li, Chen Lin, Minjian Wu, Yadong Xia, Xueqing Yan, Yang Yan (PKU, Beijing)

WEPOST056 **Characterising the PIG Ion Source**
Author: Moenir Sakieldien (iThemba LABS, Somerset West)

WEPOST057 **Laser-Driven Plasma Nuclear Fusion Based on Nanowire Array Structure Using Kilojoule-ns-Scale Laser**
Author: Defeng Kong, Zhengxuan Cao, Wenjun Ma, Zhusong Mei, Zhuo Pan, Pengjie Wang, Shirui Xu, Xueqing Yan (PKU, Beijing)

Jun 15, 2022 16:20 - 18:20 Poster Session Poster Area Padthai

WEPOPT - Poster Session - Padthai

WEPOPT001 **NICA Ion Collider and Plans of Its First Operations**
Author: Evgeny Syresin, Oleg Brovko, Andrey Butenko, Artem Galimov, Evgeny V. Gorbachev, Vladimir Kekelidze, Hamlet G. Khodzhibagiyan, Sergey Kostromin, Igor Nikolai Meshkov, Alexandr Victorovich Philippov, Anatoly O. Sidorin, Grigoriy Trubnikov, Alexey Tuzikov (JINR, Dubna, Moscow Region), Valeri A. Lebedev (JINR, Dubna)

WEPOPT002 **Conception of High Intensive Polarized Proton Beam Formation in NICA Collider**
Author: Evgeny Syresin, Andrey Butenko, Sergey Kostromin, Oleg Kozlov, Igor Nikolai Meshkov, Anatoly O. Sidorin, Grigoriy Trubnikov, Alexey Tuzikov (JINR, Dubna, Moscow Region), Natalya Mityanina (BINP SB RAS, Novosibirsk), Pavel Romanovich Zenkevich (ITEP, Moscow), Yury Filatov (MIPT, Dolgoprudniy, Moscow Region), Sergey Kolokolchikov, Yury Senichev (RAS/INR, Moscow), Anatoliy Kondratenko, M. Kondratenko (Science and Technique Laboratory Zaryad, Novosibirsk)

WEPOPT003 **Challenges of Low Energy Hadron Colliders**

Author: Grigoriy Trubnikov (JINR, Dubna, Moscow Region), Valeri A. Lebedev (JINR, Dubna), Andrey Butenko, Sergey Kostromin, Igor Nikolai Meshkov, Alexandr Victorovich Philippov, Anatoly O. Sidorin, Evgeny Syresin, Alexey Tuzikov (JINR/VBLHEP, Dubna, Moscow region)

WEPOPT004 **Acceleration and Crossing of Transition Energy Investigation Using an RF Structure of the Barrier Bucket Type in the NICA Accelerator Complex**

Author: Sergey Kolokolchikov, Aleksei A. Melnikov, Yury Senichev (RAS/INR, Moscow), Evgeny Syresin (JINR, Dubna, Moscow Region)

WEPOPT005 **Investigation of Polarized Proton Spin Coherence Time at Storage Rings**

Author: Aleksei A. Melnikov, Yury Senichev (RAS/INR, Moscow), Evgeny Syresin (JINR/VBLHEP, Dubna, Moscow region), Alexander Aksentyev (RAS/INR, Moscow; MEPhI, Moscow)

WEPOPT006 **Investigation of Spin-Decoherence in the NICA Storage Ring for the Future EDM-Measurement Experiment**

Author: Alexander Aksentyev (RAS/INR, Moscow; MEPhI, Moscow), Vladimir Ladygin, Evgeny Syresin (JINR, Dubna, Moscow Region), Aleksei A. Melnikov, Yury Senichev (RAS/INR, Moscow)

WEPOPT007 **First Interaction Region Local Coupling Corrections in the LHC Run 3**

Author: Felix Soubelet, Tobias Hakan Bjorn Persson, Rogelio Tomas (CERN, Geneva), Oznur Apsimon, Carsten Peter Welsch (Cockcroft Institute, Warrington, Cheshire)

WEPOPT008 **Supervised Machine Learning for Local Coupling Sources Detection in the LHC**

Author: Felix Soubelet, Tobias Hakan Bjorn Persson, Rogelio Tomas (CERN, Geneva), Oznur Apsimon, Carsten Peter Welsch (Cockcroft Institute, Warrington, Cheshire)

WEPOPT009 **Operational Scenario of First High Luminosity LHC Run**

Author: Rogelio Tomas, Gianluigi Arduini, Roderik Bruce, Oliver Sim Brüning, Xavier Buffat, Rama Calaga, Riccardo De Maria, Joschua Dilly, Ilias Efthymiopoulos, Massimo Giovannozzi, Giovanni Iadarola, Owain Rhodri Jones, Sofia Kostoglou, Ewen Hamish Maclean, Elias Métral, Nicolas Mounet, Yannis Papaphilippou, Stefano Redaelli, Guido Sterbini, Frederik Florentinus Van der Veken, Jorg Wenninger, Markus Zerlauth (CERN, Geneva), Helga Timko (CERN, Meyrin)

WEPOPT010 **Progress on the Action Phase Jump Method for LHC Local Optics Correction**

Author: Javier Fernando Cardona (UNAL, Bogota D.C), Hector Garcia Morales, Michael Hofer, Ewen Hamish Maclean, Tobias Hakan Bjorn Persson, Rogelio Tomas (CERN, Geneva), Yohany Rodriguez Garcia (UNAL, Bogota D.C; UAN, Bogotá D.C.)

WEPOPT011 **Modelling FCC-ee Using MADX**

Author: Léon van Riesen-Haupt, Helmut Burkhardt (CERN, Meyrin), Tobias Hakan Bjorn Persson, Rogelio Tomas (CERN, Geneva)

WEPOPT012 **Recent MAD-X Development**

Author: Tobias Hakan Bjorn Persson, Helmut Burkhardt, Riccardo De Maria, Laurent Deniau, Eirik Jaccheri Hoydalsvik, Andrea Latina, Piotr Krzysztof Skowronski, Rogelio Tomas (CERN, Geneva), Léon van Riesen-Haupt (CERN, Meyrin)

WEPOPT013 **Effect of a Spurious CLIQ Firing on the Circulating Beam in HL-LHC**
Author: Cédric Hernalsteens, Bjorn Lindstrom (CERN, Meyrin), Emmanuele Ravaioli, Oskari Kristian Tuormaa, Meritxell Villen Basco, Christoph Wiesner, Daniel Wollmann (CERN, Geneva)

WEPOPT014 **The Effect of a Partially Depleted Halo on the Criticality and Detectability of Fast Failures in the HL-LHC**
Author: Cédric Hernalsteens (CERN, Meyrin), Christophe Lannoy, Oskari Kristian Tuormaa, Meritxell Villen Basco, Christoph Wiesner, Daniel Wollmann (CERN, Geneva)

WEPOPT015 **Study of Hydrodynamic-Tunnelling Effects Induced by High-Energy Proton Beams in Graphite**
Author: Christoph Wiesner, Federico Carra, Jeppe Don, Inken Marei Kolthoff, Anton Lechner, Silvio Riccardo Rasile, Daniel Wollmann (CERN, Meyrin)

WEPOPT016 **Beam-Based Reconstruction of the Shielded Quench-Heater Fields for the LHC Main Dipoles**
Author: Lea Caterina Richtmann, Christoph Wiesner, Daniel Wollmann (CERN, Meyrin), Lorenzo Bortot, Emmanuele Ravaioli (CERN, Geneva)

WEPOPT017 **First Optics Design for a Transverse Monochromatic Scheme for the Direct S-Channel Higgs Production at FCC-ee Collider**
Author: Hongping Jiang (Harbin Institute of Technology□HIT□, Harbin), Frank Zimmermann (CERN, Meyrin), Zhandong Zhang (IHEP, Beijing; UCAS, Beijing), Katsunobu Oide (KEK, Ibaraki), Angeles Faus-Golfe (Université Paris-Saclay, CNRS/IN2P3, IJCLab, Orsay)

WEPOPT018 **Next Generation Computational Tools for the Modeling and Design of Particle Accelerators at Exascale**
Author: Axel Huebl (LBNL, Berkeley)

WEPOPT019 **Optimizing Polarization in RHIC Collider with Decayed Siberian Snake - Numerical Approach**
Author: Francois Meot, Elke Caroline Aschenauer, Haixin Huang, Al Marusic, Vadim Ptitsyn, Vahid Houston Ranjbar, Guillaume Robert-Demolaize, Vincent Schoefer (BNL, Upton, New York)

WEPOPT020 **Modeling RHIC Spin Tilt as Lattice Imperfections**
Author: Vahid Houston Ranjbar, Elke Caroline Aschenauer, Haixin Huang, Al Marusic, Francois Meot, Vincent Schoefer (BNL, Upton, New York)

WEPOPT021 **A Discharge Plasma Development Platform for Accelerators: The ADVANCE Lab at DESY**
Author: James Matthew Garland, Richard D'Arcy, Gregor Loisch, Kai Ludwig, Jens Osterhoff, Amir Rahali, Andrej Schleiermacher, Stephan Wesch (DESY, Hamburg)

WEPOPT022 **A Pulsed Solenoid as Matching Device for the ILC Undulator-Based Positron Source**
Author: Carmen Tenholt (Helmholtz-Zentrum Hereon, Geesthacht), Matthijs Mentink, Peter Sievers (CERN, Geneva), Sabine Riemann (DESY Zeuthen, Zeuthen), Gregor Loisch (DESY, Hamburg), Gudrid Angela Moortgat-Pick (DESY, Hamburg; University of Hamburg, Hamburg), Masafumi Fukuda, Toshiyuki Okugi, Kaoru Yokoya (KEK, Ibaraki)

WEPOPT023 **A Design of ILC E-Driven Positron source**

Author: Masao Kuriki, Shun Konno, Zachary Liptak (HU/AdSM, Higashi-Hiroshima), Hiroki Tajino (HU ADSE, Hiroshima), Tohru Takahashi (Hiroshima University, Higashi-Hiroshima), Masafumi Fukuda, Tsunehiko Omori, Yuji Seimiya, Junji Urakawa, Kaoru Yokoya (KEK, Ibaraki), Shigeru Kashiwagi (Tohoku University, Sendai)

WEPOPT024 **Beam Loading Compensation of Standing Wave Linac With Off-Crest Acceleration**

Author: Masao Kuriki, Shun Konno, Zachary Liptak (HU/AdSM, Higashi-Hiroshima), Hiroki Tajino (HU ADSE, Hiroshima), Tohru Takahashi (Hiroshima University, Higashi-Hiroshima), Masafumi Fukuda, Tsunehiko Omori, Yuji Seimiya, Junji Urakawa, Kaoru Yokoya (KEK, Ibaraki), Shigeru Kashiwagi (Tohoku University, Sendai)

WEPOPT025 **Flat Beam Generation With the Phase Space Rotation Technique at KEK-STF**

Author: Masao Kuriki, Zachary Liptak (HU/AdSM, Higashi-Hiroshima), Shinya Aramoto (Hiroshima University, Higashi-Hiroshima), Hitoshi Hayano, Xiuguang Jin, Yuji Seimiya, Naoto Yamamoto, Yasuchika Yamamoto (KEK, Ibaraki), Masakazu Washio (RISE, Tokyo), Kazuyuki Sakaue (The University of Tokyo, Bunkyo), Shigeru Kashiwagi (Tohoku University, Sendai)

WEPOPT026 **Possibilities for a Polarized Electron Beam at SuperKEKB**

Author: Zachary Liptak (HU/AdSM, Higashi-Hiroshima)

WEPOPT027 **A Demonstrator for Muon Ionisation Cooling**

Author: Chris Rogers (STFC/RAL/ISIS, Chilton, Didcot, Oxon), Daniel Schulte (CERN, Meyrin)

WEPOPT028 **Design Updates on the EIC Hadron Storage Ring Injection Kicker**

Author: Medani Prasad Sangroula, Chong-Jer Liaw, Chuyu Liu, Jon Sandberg, Nicholaos Tsoupas, Binping Xiao (BNL, Upton, New York), Xiang Sun (ANL, Lemont, Illinois)

WEPOPT029 **The ReLiC: Recycling Linear Polarized e+e- Collider**

Author: Vladimir N. Litvinenko (Stony Brook University, Stony Brook), Maria Chamizo Llatas, Thomas Roser (BNL, Upton, New York)

WEPOPT030 **3D Theory of Short-Wavelength Instabilities Driven by Space-Charge**

Author: Vladimir N. Litvinenko (Stony Brook University, Stony Brook), Yichao Jing, Jun Ma, Gang Wang (BNL, Upton, New York), Kai Shih (SBU, Stony Brook, New York), Irina Petrushina (SUNY SB, Stony Brook, New York)

WEPOPT031 **CERC - Circular e+e- Collider using Energy-Recovery Linac**

Author: Vladimir N. Litvinenko, Yichao Jing, Maria Chamizo Llatas, Francois Meot, Thomas Roser (BNL, Upton, New York)

WEPOPT032 **Summary of the 3-year Beam Energy Scan II operation at RHIC**

Author: Chuyu Liu, Petra Adams, Edward Beebe, Severino Binello, Ian Blackler, Michael Blaskiewicz, Kevin A. Brown, Donald Bruno, Benjamin Coe, Kirsten Angelika Drees, Alexei V. Fedotov, Wolfram Fischer, Chris J. Gardner, Caitlin Giorgio, Xiaofeng Gu, Thomas Hayes, Kiel Hock, Haixin Huang, Robert Hulsart, Takeshi Kanesue, Dmitry Kayran, Nicholas Abram Kling, Brendan Lepore, Yun Luo, David Maffei, Gregory James Marr, Al Marusic, Kevin Mernick, Robert Michnoff, Michiko Minty, John Morris, Christopher Naylor, Seth Nemesure, Masahiro Okamura, Igor Pinayev, Salvatore Polizzo, Deepak Raparia, Guillaume Robert-Demolaize, Thomas Roser, Jon Sandberg, Vincent Schoefer, Sergei Seletskiy, Freddy Severino, Travis Shrey, Peter Thieberger, Matthieu Valette, Alex Zaltsman, Iris Zane, Keith Zeno, Wu Zhang, He Zhao (BNL, Upton, New York)

WEPOPT033 **Report of RHIC Beam Operation in 2021**

Author: Chuyu Liu, Petra Adams, Edward Beebe, Severino Binello, Ian Blackler, Michael Blaskiewicz, Kevin A. Brown, Donald Bruno, Benjamin Coe, Kirsten Angelika Drees, Alexei V. Fedotov, Wolfram Fischer, Chris J. Gardner, Caitlin Giorgio, Xiaofeng Gu, Thomas Hayes, Kiel Hock, Haixin Huang, Robert Hulsart, Takeshi Kanesue, Dmitry Kayran, Nicholas Abram Kling, Brendan Lepore, Yun Luo, David Maffei, Gregory James Marr, Al Marusic, Kevin Mernick, Robert Michnoff, Michiko Minty, John Morris, Christopher Naylor, Seth Nemesure, Masahiro Okamura, Igor Pinayev, Salvatore Polizzo, Deepak Raparia, Guillaume Robert-Demolaize, Thomas Roser, Jon Sandberg, Vincent Schoefer, Sergei Seletskiy, Freddy Severino, Travis Shrey, Peter Thieberger, Matthieu Valette, Alex Zaltsman, Iris Zane, Keith Zeno, Wu Zhang, He Zhao (BNL, Upton, New York)

WEPOPT034 **Reconfiguration of RHIC Straight Sections for the EIC**

Author: Chuyu Liu, J. Scott Berg, Donald Bruno, Christian Cullen, Kirsten Angelika Drees, Wolfram Fischer, Xiaofeng Gu, Ramesh C. Gupta, Douglas Holmes, Robert Lambiase, Henry Lovelace III, Christoph Montag, Steve Peggs, Vadim Ptitsyn, Guillaume Robert-Demolaize, Roberto Than, Joseph Tuozzolo, Matthieu Valette, Silvia Verdu-Andres, Daniel Weiss (BNL, Upton, New York), Bijan Bhandari, Nicholaos Tsoupas (Brookhaven National Laboratory (BNL), Upton, New York), Walter Wittmer (JLab, Newport News), Bamunuvita Randika Gamage, Todd Satogata (JLab, Newport News, Virginia)

WEPOPT035 **Optics for Strong Hadron Cooling in EIC HSR-IR2**

Author: Steve Peggs, William Frederick Bergan, Donald Bruno, Yuan Gao, Douglas Holmes, Robert Lambiase, Chuyu Liu, Henry Lovelace III, George Mahler, Vadim Ptitsyn, Guillaume Robert-Demolaize, Roberto Than, Joseph Tuozzolo, Erdong Wang, Daniel Weiss, Derong Xu (BNL, Upton, New York), Frederic Micolon (Brookhaven National Laboratory (BNL), Upton, New York), Stephen Vincent Benson, Tim Michalski (JLab, Newport News, Virginia)

WEPOPT036 **Dependence of Beam Size Growth on Macro-particle's Initial Actions in Strong-strong Beam-beam Simulation for the Electron-Ion Collider**

Author: Yun Luo, J. Scott Berg, Michael Blaskiewicz, Wolfram Fischer, Xiaofeng Gu, Henry Lovelace III, Christoph Montag, Steve Peggs, Vadim Ptitsyn, Ferdinand J. Willeke, Derong Xu (BNL, Upton, New York), Georg H. Hoffstaetter (Cornell University (CLASSE), Ithaca, New York), Yue Hao (FRIB, East Lansing, Michigan), He Huang, Edith Anne Nissen, Todd Satogata (JLab, Newport News, Virginia), Ji Qiang (LBNL, Berkeley, California), Vasiliy Morozov (ORNL RAD, Oak Ridge, Tennessee)

WEPOPT037 **Dynamic Aperture Evaluation for EIC Hadron Storage Ring with Crab Cavities and IR Nonlinear Magnetic Field Errors**

Author: Yun Luo, J. Scott Berg, Wolfram Fischer, Xiaofeng Gu, Henry Lovelace III, Christoph Montag, Steve Peggs, Vadim Ptitsyn, Holger Witte, Derong Xu (BNL, Upton, New York), Yue Hao (FRIB, East Lansing, Michigan), Todd Satogata (JLab, Newport News, Virginia), Ji Qiang (LBNL, Berkeley, California), Vasiliy Morozov (ORNL RAD, Oak Ridge, Tennessee)

WEPOPT038 **Summary of Numerical Noise Studies for Electron-Ion Collider Strong-Strong Beam-Beam Simulation**
Author: Yun Luo, J. Scott Berg, Michael Blaskiewicz, Wolfram Fischer, Xiaofeng Gu, Jorg Kewisch, Henry Lovelace III, Christoph Montag, Steve Peggs, Vadim Ptitsyn, Ferdinand J. Willeke, Derong Xu (BNL, Upton, New York), Georg H. Hoffstaetter (Cornell University (CLASSE), Ithaca, New York), Yue Hao (FRIB, East Lansing, Michigan), Bamunuvita Randika Gamage, He Huang, Edith Anne Nissen, Todd Satogata (JLab, Newport News, Virginia), Ji Qiang (LBNL, Berkeley, California), Vasiliy Morozov (ORNL RAD, Oak Ridge, Tennessee)

WEPOPT039 **Fine Decoupling Test and Simulation Study to Maintain a Large Transverse Emittance Ratio in Hadron Storage Rings**
Author: Yun Luo, Ian Blackler, Michael Blaskiewicz, Wolfram Fischer, Al Marusic, Christoph Montag, Travis Shrey, Derong Xu (BNL, Upton, New York)

WEPOPT040 **Numerical Noise Error of Particle-In-Cell Poisson Solver for a Flat Gaussian Bunch**
Author: Yun Luo, J. Scott Berg, Michael Blaskiewicz, Wolfram Fischer, Xiaofeng Gu, Jorg Kewisch, Henry Lovelace III, Christoph Montag, Steve Peggs, Vadim Ptitsyn, Ferdinand J. Willeke (BNL, Upton, New York), Georg H. Hoffstaetter (Cornell University (CLASSE), Ithaca, New York), Yue Hao (FRIB, East Lansing, Michigan), Bamunuvita Randika Gamage, He Huang, Edith Anne Nissen, Todd Satogata (JLab, Newport News, Virginia), Ji Qiang (LBNL, Berkeley, California), Vasiliy Morozov (ORNL RAD, Oak Ridge, Tennessee)

WEPOPT041 **Strong-Strong Simulations of Coherent Beam-Beam Effects in the EIC**
Author: Ji Qiang (LBNL, Berkeley, California), Yun Luo, Christoph Montag, Ferdinand J. Willeke, Derong Xu (BNL, Upton, New York), Yue Hao (FRIB, East Lansing, Michigan)

WEPOPT042 **Designing the EIC Electron Storage Ring Lattice for a Wide Energy Range**
Author: Daniel Marx, J. Scott Berg, Jorg Kewisch, Yongjun Li, Christoph Montag, Vadim Ptitsyn, Steven Tepikian, Ferdinand J. Willeke, Derong Xu (BNL, Upton, New York), Georg H. Hoffstaetter, David Sagan, Jonathan Unger (Cornell University (CLASSE), Ithaca, New York), Matthew George Signorelli (Cornell University, Ithaca, New York), Bamunuvita Randika Gamage (JLab, Newport News, Virginia), Vasiliy Morozov (JLab, Newport News, Virginia; ORNL RAD, Oak Ridge, Tennessee), Yunhai Cai, Yuri Nosochkov (SLAC, Menlo Park, California)

WEPOPT043 **Dynamic Aperture of the EIC Electron Storage Ring**
Author: Yuri Nosochkov, Yunhai Cai (SLAC, Menlo Park, California), J. Scott Berg, Jorg Kewisch, Yongjun Li, Daniel Marx, Christoph Montag, Steven Tepikian, Holger Witte (BNL, Upton, New York), Georg H. Hoffstaetter, Jonathan Unger (Cornell University (CLASSE), Ithaca, New York)

WEPOPT044 **Electron-Ion Collider Design Status**

Author: Christoph Montag, Elke Caroline Aschenauer, Gabriele Bassi, Joanne Beebe-Wang, J. Scott Berg, Michael Blaskiewicz, Joseph Michael Brennan, Stephen Brooks, Kevin A. Brown, Zachary Alan Conway, Kirsten Angelika Drees, Alexei V. Fedotov, Wolfram Fischer, Charles Michael Folz, Xiaofeng Gu, Ramesh C. Gupta, Yue Hao, Charles Hetzel, Douglas Holmes, Haixin Huang, Jorg Kewisch, Yongjun Li, Chuyu Liu, Henry Lovelace III, Yun Luo, George Mahler, Daniel Marx, Francois Meot, Michiko Minty, Sumanta Kumar Nayak, Robert B. Palmer, Brett Parker, Steve Peggs, Vadim Ptitsyn, Vahid Houston Ranjbar, Guillaume Robert-Demolaize, Medani Prasad Sangroula, Sergei Seletskiy, Kevin S. Smith, Steven Tepikian, Roberto Than, Peter Thieberger, Nicholaos Tsoupas, Joseph Tuozzolo, Erdong Wang, Daniel Weiss, Ferdinand J. Willeke, Holger Witte, Qiong Wu, Derong Xu, Wencan Xu, Alex Zaltsman (BNL, Upton, New York), Alexei Blednykh, David Gassner, Boris Podobedov, Silvia Verdu-Andres (Brookhaven National Laboratory (BNL), Upton, New York), Georg H. Hoffstaetter, David Sagan, Jonathan Unger (Cornell University (CLASSE), Ithaca, New York), Matthew George Signorelli (Cornell University, Ithaca, New York), Eliana Gianfelice-Wendt (Fermilab, Batavia, Illinois), Walter Wittmer (JLab, Newport News), Stephen Vincent Benson, Bamunuvita Randika Gamage, Joseph Michael Grames, Tim Michalski, Edith Anne Nissen, Joseph P. Preble, Robert Rimmer, Todd Satogata, Andrei Seryi, Mark Wiseman (JLab, Newport News, Virginia), Fanglei Lin, Vasiliy Morozov (ORNL RAD, Oak Ridge, Tennessee), Yunhai Cai, Yuri Nosochkov, Gennady Stupakov, Michael Sullivan (SLAC, Menlo Park, California)

WEPOPT045 **Transverse Electron Beam Tails and Lifetime in the EIC Electron Storage Ring**

Author: Christoph Montag (BNL, Upton, New York)

WEPOPT046 **An Active Plasma-Lens for Optical Matching at the ILC Undulator-Based Positron Source**

Author: Manuel Formela, Niclas Hamann (University of Hamburg, Hamburg), Klaus Floettmann, Gregor Loisch (DESY, Hamburg), Gudrid Angela Moortgat-Pick (DESY, Hamburg; University of Hamburg, Hamburg)

WEPOPT047 **Beam Optics of the Injection and Extraction Beam Lines of the EIC Synchrotrons**

Author: Nicholaos Tsoupas, Douglas Holmes, Chuyu Liu, Christoph Montag, Vadim Ptitsyn, Vahid Houston Ranjbar, John Skaritka, Joseph Tuozzolo, Erdong Wang, Ferdinand J. Willeke (BNL, Upton, New York), Bijan Bhandari (Brookhaven National Laboratory (BNL), Upton, New York)

WEPOPT049 **Beam-Beam Interaction for Tilted Storage Ring**

Author: Derong Xu (BNL, Upton, New York), Yun Luo (Brookhaven National Laboratory (BNL), Upton, New York)

WEPOPT050 **Detector Solenoid Compensation in EIC Electron Storage Ring**

Author: Derong Xu (BNL, Upton, New York), Yun Luo (Brookhaven National Laboratory (BNL), Upton, New York)

WEPOPT052 **Studies of a PIP-II Mu2e Experiment**

Mary Anne Clare Cummings - Muons, Inc

WEPOPT053 **Characterisation of Cooling in the Muon Ionisation Cooling Experiment**

Author: Chris Rogers (STFC/RAL/ISIS, Chilton, Didcot, Oxon), Mary Anne Clare Cummings (Muons, Inc, Illinois)

WEPOPT054 **Target Studies for the FCC-ee Positron Source**

Author: Salim Ogur, Fahad Alharthi, Iryna Chaikovska, Robert Chehab, Sandry Wallon (Université Paris-Saclay, CNRS/IN2P3, IJCLab, Orsay), Peter Sievers (CERN, Geneva), Werner Lauth (IKP, Mainz), Laura Bandiera, Andrea Mazzolari, Marco Romagnoni, Alexei Igorevich Sytov (INFN-Ferrara, Ferrara), Denys Mykhaylovych Klekots (National Taras Shevchenko University of Kyiv, Kyiv), Oleksandra Khomyshyn (Taras Shevchenko National University of Kyiv, Kyiv), Mattia Soldani (Università degli Studi di Ferrara, Ferrara)

WEPOPT055 **Linac3, LEIR and PS Performance in 2021 and Prospects for 2022**

Author: Nicolo Biancacci, Reyes Alemany-Fernandez, Diogo Alves, Maria Elena Angoletta, Hannes Bartosik, Giulia Bellodi, Heiko Damerau, Davide Gamba, Verena Kain, Detlef Kuchler, Alexandre Lasheen, Thomas Edward Levens, Phani Deep Meruga, Christophe Mutin, Michael O'Neil, Richard Scrivens, Daniel Valuch, Francesco Maria Velotti, Rolf Wegner, Chris Wetton (CERN, Meyrin), Simon Christopher Paul Albright, Diego Barrientos, Sebastien Bertolo, Dominique Bodart, Michele Bozzolan, Francesco Di Lorenzo, Alexandre Frassier, Alexander Huschauer, Steen Jensen, Toke Koevener, Gerd Kotzian, Gilles Le Godec, Nico Madysa, Edgar Mahner, Ole Marqversen, Cristiano Mastrostefano, Michail Zampetakis (CERN, Geneva), Giampaolo Piccinini, Preben Sandve Solvang (CERN, Geneva 23)

WEPOPT057 **Coupling Effects of Beam-Beam Interaction and Longitudinal Impedance**

Author: Chuntao Lin (University of Chinese Academy of Sciences, Beijing), Yuan Zhang (IHEP, Beijing), Kazuhito Ohmi (KEK, Ibaraki)

WEPOPT058 **A Response Matrix Approach to Skew-Sextupole Correction in the LHC at Injection**

Author: Elias Waagaard (Uppsala University, Uppsala), Ewen Hamish Maclean (CERN, Geneva)

WEPOPT059 **Corrections of Systematic Normal Decapole Field Errors in the HL-LHC Separation/Recombination Dipoles**

Author: Joschua Dilly, Massimo Giovannozzi, Rogelio Tomas, Frederik Florentinus Van der Veken (CERN, Geneva)

WEPOPT060 **Controlling Landau Damping via Feed-Down From High-Order Correctors in the LHC and HL-LHC Beam Optics**

Author: Joschua Dilly, Ewen Hamish Maclean, Rogelio Tomas (CERN, Geneva)

WEPOPT061 **A Flexible Nonlinear Resonance Driving Term Based Correction Algorithm With Feed-Down**

Author: Joschua Dilly, Rogelio Tomas (CERN, Geneva)

WEPOPT062 **Optimisation of the FCC-ee Positron Source Using a HTS Solenoid Matching Device**

Author: Yongke Zhao, Andrea Latina, Salim Ogur (CERN, Geneva), Pavel Martyshkin (BINP SB RAS, Novosibirsk), Steffen Doebert (CERN, Meyrin), Michal Duda (IFJ-PAN, Kraków), Bernhard Auchmann, Paolo Craievich, Jaap Kosse, Riccardo Zennaro (PSI, Villigen PSI), Iryna Chaikovska, Robert Chehab (Université Paris-Saclay, CNRS/IN2P3, IJCLab, Orsay)

WEPOPT063 **The FCC-ee Injector Complex**

Author: Paolo Craievich, Bernhard Auchmann, Simona Bettoni, Hans-Heinrich Braun, Michal Duda, Eike Hohmann, Rasmus Ischebeck, Pavle Juranic, Jaap Kosse, Gian Luca Orlandi, Marco Pedrozzi, Jean-Yves Raguin, Sven Reiche, Stephane Sanfilippo, Mattia Schaer, Riccardo Zennaro (PSI, Villigen PSI), Maria Ilaria Besana, Andrea Latina, Yongke Zhao (CERN, Geneva), Yann Dutheil (CERN, Geneva 23), Ozgur Etisken (CERN, Geneva; Kirikkale University, Kirikkale), Wolfgang Bartmann, Michael Benedikt, Marco Calviani, Steffen Doebert, Jean-Louis Grenard, Alexej Grudiev, Barbara Humann, Anton Lechner, Antonio Perillo-Marcone, Hermann Winrich Pommerenke, Rebecca Ramjiawan, Frank Zimmermann (CERN, Meyrin), Katsunobu Oide (CERN, Meyrin; KEK, Ibaraki), Nicolas Vallis (EPFL, Lausanne; PSI, Villigen PSI), Antonio De Santis (INFN/LNF, Frascati), Yoshinori Enomoto, Kazuro Furukawa (KEK, Ibaraki), Catia Milardi (LNF-INFN, Frascati), Tor Raubenheimer (SLAC, Menlo Park, California), Fahad Alharthi, Iryna Chaikovska, Salim Ogur (Université Paris-Saclay, CNRS/IN2P3, IJCLab, Orsay)

WEPOPT064 **Simulations and Measurements of Luminosity at SuperKEKB**

Author: Demin Zhou, Yoshihiro Funakoshi, Kazuhito Ohmi (KEK, Ibaraki), Yuan Zhang (IHEP, Beijing)

WEPOPT065 **Simulations of the Upgraded Drive-Beam Photoinjector at the Argonne Wakefield Accelerator**

Author: Emily Frame, Philippe Regis-Guy Piot (Northern Illinois University, DeKalb, Illinois), Seongyeol Kim, Xueying Lu, John Gorham Power, Doran Scott, Eric Edson Wisniewski (ANL, Lemont, Illinois)

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WEPOTK - Poster Session - Tomyam Kung

WEPOTK001 **Status of the Normal Conducting Linac at the European Spallation Source**

Author: Ciprian Plostinar, Andreas Jansson (ESS, Lund)

WEPOTK002 **Investigation and Simulation of a 2m Long Electron Column Trapped in Gabor Lens Device**

Author: Katrin Isabell Thoma, Martin Droba, Oliver Meusel (IAP, Frankfurt am Main)

WEPOTK003 **Status of the Development of the Electron Lens for Space Charge Compensation at GSI**

Author: Kathrin Silvana Schulte-Urlichs, David Ondreka, Peter J. Spiller, Katrin Isabell Thoma (GSI, Darmstadt), Thomas Dönges, Martin Droba, Oliver Meusel, Holger Podlech (IAP, Frankfurt am Main)

WEPOTK004 **Status and Upgrade Plan of the MR Ring RF Systems in J-PARC**

Author: Katsushi Hasegawa (KEK, Ibaraki), Hidefumi Okita (JAEA/J-PARC, Tokai-Mura, Naka-Gun, Ibaraki-Ken), Masahiro Nomura, Taihei Shimada, Fumihiko Tamura, Masanobu Yamamoto (JAEA/J-PARC, Tokai-mura), Keigo Hara, Chihiro Ohmori, Yasuyuki Sugiyama, Masahito Yoshii (KEK, Tokai, Ibaraki)

WEPOTK005 **Electromagnetic Analysis of a Circular Storage Ring for Quantum Computing Using Vsim**
Author: Salvador Isaac Sosa Guitron (UNM-ECE, Albuquerque), Bohong Huang (SBU, Stony Brook), Sandra Biedron (UNM-ECE, Albuquerque; UNM-ME, Albuquerque, New Mexico)

WEPOTK006 **Proton Beamline Simulations for the High Intensity Muon Beamline at PSI**
Author: Malek Haj Tahar, Daniela Candida Kiselev, Andreas Knecht, Daniel Laube, Davide Reggiani, Jochem Snuverink, Vadim Talanov (PSI, Villigen PSI)

WEPOTK007 **Simulating Quasi-Integrable Optics with Space Charge in the IBEX Paul Trap**
Author: Jake Flowerdew (University of Oxford, Oxford), David John Kelliher, Shinji Machida, Suzanne L. Sheehy (STFC/RAL/ASTeC, Chilton, Didcot, Oxon)

WEPOTK008 **Future Neutrino Beam Studies at CERN in the Framework of the Physics Beyond Colliders Initiative**
Author: Elisabetta Giulia Parozzi (Universita Milano Bicocca, MILANO), Johannes Bernhard, Nikolaos Charitonidis (CERN, Geneva), Carlo Alberto Mussolini (CERN, Geneva; JAI, Oxford), Markus Brugger, Mathieu Perrin-Terrin (CERN, Meyrin), Yoshikazu Nagai (Colorado University at Boulder, Boulder, Colorado; ELTE, Budapest)

WEPOTK009 **Processes and Tools to Manage CERN Programmed Stops Applied to the Second Long Shutdown of the Accelerator Complex**
Author: Estrella Vergara Fernandez, Maria Barberan Marin, Marzia Bernardini, Samy Chemli, Julie Coupard, Katy Foraz, Michela Pirozzi, Jean-Philippe Georges Tock (CERN, Meyrin), Antoine Ansel, David Hay, José Miguel Jimenez, David Jason Mcfarlane, Fernando Pedrosa (CERN, Geneva)

WEPOTK010 **The Second Long Shutdown of the LHC and Its Injectors: Feedback From the Accelerator Coordination and Engineering Group**
Author: Anne-Laure Perrot, Samy Chemli, Jean-Pierre Corso, Julie Coupard, Serge Grillot, José Miguel Jimenez, Bertrand Nicquevert (CERN, Geneva), Marzia Bernardini, Fernando Baltasar Dos Santos Pedrosa, John Etheridge, Katy Foraz, Stephan Petit, Jean-Philippe Georges Tock, Estrella Vergara Fernandez (CERN, Meyrin)

WEPOTK011 **High Intensity Studies in the CERN Proton Synchrotron Booster**
Author: Foteini Asvesta, Hannes Bartosik, Gian Piero Di Giovanni, Giovanni Rumolo, Piotr Krzysztof Skowronski, Carlo Zannini (CERN, Geneva), Simon Christopher Paul Albright, Fanouria Antoniou, Chiara Bracco (CERN, Meyrin), Elisabeth Renner (TU Vienna, Wien)

WEPOTK012 **Commissioning the New LLRF System of the CERN PS Booster**
Author: Simon Christopher Paul Albright, Diego Barrientos, Michael Jaussi (CERN, Geneva 23), Maria Elena Angoletta, Alan Findlay, John Cornelis Molendijk (CERN, Geneva)

WEPOTK013 **Direct Impedance Measurement of the CERN PS Booster Finemet Cavities**
Author: Simon Christopher Paul Albright, Diego Barrientos, Michael Jaussi (CERN, Geneva 23), Maria Elena Angoletta, Alan Findlay, John Cornelis Molendijk (CERN, Geneva)

WEPOTK014 **Hadron Storage Ring 4 O'clock Injection Design and Optics for the Electron-Ion Collider**
Author: Henry Lovelace III, J. Scott Berg, Donald Bruno, Christian Cullen, Kirsten Angelika Drees, Wolfram Fischer, Xiaofeng Gu, Ramesh C. Gupta, Douglas Holmes, Robert Lambiase, Chuyu Liu, Christoph Montag, Steve Peggs, Vadim Ptitsyn, Guillaume Robert-Demolaize, Roberto Than, Joseph Tuozzolo, Matthieu Valette, Daniel Weiss (BNL, Upton, New York), Bijan Bhandari, Frederic Micolon, Nicholaos Tsoupas, Silvia Verdu-Andres (Brookhaven National Laboratory (BNL), Upton, New York), Walter Wittmer (JLab, Newport News), Bamunuvita Randika Gamage, Todd Satogata (JLab, Newport News, Virginia)

WEPOTK015 **The Electron-Ion Collider Hadron Storage Ring 10 O'clock Switchyard Design**
Author: Henry Lovelace III, J. Scott Berg, Donald Bruno, Christian Cullen, Kirsten Angelika Drees, Wolfram Fischer, Xiaofeng Gu, Ramesh C. Gupta, Douglas Holmes, Robert Lambiase, Chuyu Liu, Christoph Montag, Steve Peggs, Vadim Ptitsyn, Guillaume Robert-Demolaize, Roberto Than, Joseph Tuozzolo, Matthieu Valette, Daniel Weiss (BNL, Upton, New York), Bijan Bhandari, Frederic Micolon, Silvia Verdu-Andres (Brookhaven National Laboratory (BNL), Upton, New York), Walter Wittmer (JLab, Newport News), Todd Satogata (JLab, Newport News, Virginia)

WEPOTK016 **Studies of ECR Plasmas and Material Modifications/synthesis Using Low Energy Ion Beam Facility at IUAC**
Author: Puneeta Tripathi, Pravin Kumar, Shushant Kumar Singh (IUAC, New Delhi)

WEPOTK017 **An Efficient H-/ D- Extraction in Neutral Beam Injection (NBI) Ion Sources**
Author: Vincenzo Variale (INFN-Bari, Bari), Marco Cavenago (INFN/LNL, Legnaro (PD))

WEPOTK018 **Simulation of Heavy-Ion Beam Losses With Crystal Collimation**
Author: Rongrong Cai, Marco D'Andrea, Luigi Salvatore Esposito, Pascal Dominik Hermes, Daniele Mirarchi, Stefano Redaelli, Philippe Schoofs (CERN, Geneva), Francesc Salvat Pujol (CERN, Geneva 23), Roderik Bruce, Anton Lechner (CERN, Geneva; CERN, Meyrin), Jean-Baptiste Potoine (CERN, Meyrin; IES, Montpellier), Mike Seidel (PSI, Villigen PSI)

WEPOTK019 **Status of the Laser Ion Source Upgrade (LION2) at BNL**
Author: Takeshi Kanesue, Benjamin Coe, Michael Costanzo, Shunsuke Ikeda, Sergey A. Kondrashev, Chong-Jer Liaw, Adam Lopez-Reyes, Masahiro Okamura, Robert H. Olsen, Trevor Rodowicz, Ralph Schoenfeld, Robert Schoepfer, Loralie Smart, Daniel Weiss, Yi Zhang (BNL, Upton, New York)

WEPOTK020 **Slanted Beam Extraction on Laser Ion Source**
Author: Masahiro Okamura, Shunsuke Ikeda, Takeshi Kanesue, Sergey A. Kondrashev (BNL, Upton, New York), Antonino Cannavò (NPI, Rez near Prague)

WEPOTK021 **Improvement of Spill Quality for Slowly Extracted Ions at GSI-SIS18 via Transverse Emittance Exchange**
Author: Jiangyan Yang, Peter Forck, Tino Giacomini, Philipp Niedermayer, Rahul Singh, Stefan Sorge (GSI, Darmstadt)

WEPOTK022 **Horizontal Beam Response at Extraction Conditions at the Heidelberg Ion-Beam Therapy Centre**
Author: Edgar Cristopher Cortés García, Eike Feldmeier, Thomas Haberer (HIT, Heidelberg)

WEPOTK023 **The Study of Beam Simulation for Fast Extraction Without One of the Septum Magnets at of J-PARC Main Ring**
Author: TSoma Iwata, Takaaki Yasui (KEK, Tokai, Ibaraki), Susumu Igarashi, Koji Ishii, Hiroshi Matsumoto, Noriyuki Matsumoto, Yoichi Sato, Tatsunobu Shibata, Takuya Sugimoto (KEK, Ibaraki)

WEPOTK024 **Upgrade of the Septum Magnets for Fast Extraction at J-PARC Main Ring**
Author: Soma Iwata (KEK, Tokai, Ibaraki), Koji Ishii, Hiroshi Matsumoto, Noriyuki Matsumoto, Yoichi Sato, Tatsunobu Shibata, Takuya Sugimoto, Masahiko Uota (KEK, Ibaraki)

WEPOTK025 **Concepts and Considerations for FCC-ee Top-Up Injection Strategies**
Author: Rebecca Ramjiawan (CERN, Meyrin), Michael Hofer (CERN, Geneva), Wolfgang Bartmann, Yann Dutheil (CERN, Geneva 23), Patrick James Hunchak (CLS, Saskatoon, Saskatchewan; University of Saskatchewan, Saskatoon), Masamitsu Aiba (PSI, Villigen PSI)

WEPOTK026 **Commissioning of the ELENA Electrostatic Transfer Lines for the Antimatter Facility at CERN**
Author: Yann Dutheil, Wolfgang Bartmann, Matthew Alexander Fraser (CERN, Geneva 23), Christian Carli, Davide Gamba, Laurette Ponce (CERN, Geneva)

WEPOTK028 **Implementation of RF Channeling at the CERN PS for Spill Quality Improvements**
Author: Pablo Andreas Arrutia Sota, Francesco Maria Velotti (CERN, Meyrin), Mihaly Vadai (CERN, Geneva), Heiko Damerau, Matthew Alexander Fraser (CERN, Geneva 23), Philip Burrows (JAI, Oxford)

WEPOTK029 **Advances in Low Energy Antimatter Beam Generation, Manipulation and Cooling**
Author: Carsten Peter Welsch (Cockcroft Institute, Warrington, Cheshire; The University of Liverpool, Liverpool)

WEPOTK030 **Simulations of Transverse Asymmetry and Inhomogeneity on Seeded Self-Modulation of Beams in Plasma**
Author: Aravinda Perera (Cockcroft Institute, Warrington, Cheshire; The University of Liverpool, Liverpool), Javier Resta (IFIC, Valencia), Oznur Apsimon, Carsten Peter Welsch (The University of Liverpool, Liverpool; Cockcroft Institute, Warrington, Cheshire)

WEPOTK031 **Low-Energy Negative Ion Injection Beamline for Experiments With Antiprotonic Atoms at AEgIS**
Author: Volodymyr Rodin, Aaron Farricker (The University of Liverpool, Liverpool), Michael Doser, Ghanshyambhai Khatri (CERN, Geneva), Carsten Peter Welsch (Cockcroft Institute, Warrington, Cheshire; The University of Liverpool, Liverpool), Giovanni Cerchiari (Institut für Experimentalphysik, Innsbruck), Georgy Kornakov (Warsaw University of Technology, Warsaw)

WEPOTK032 **Realistic Simulations of Antiproton Deceleration in Foil Degraders**
Author: Steve Padden (Cockcroft Institute, Warrington, Cheshire; The University of Liverpool, Liverpool), Egidijus Kukstas, Petteri Pusa (The University of Liverpool, Liverpool), Volodymyr Rodin, Carsten Peter Welsch (The University of Liverpool, Liverpool; Cockcroft Institute, Warrington, Cheshire)

WEPOTK033 **Layouts for Feasibility Studies of Fixed-Target Experiments at the LHC**
Author: Pascal Dominik Hermes, Kay Dewhurst, Alex Fomin, Daniele Mirarchi, Stefano Redaelli (CERN, Geneva)

WEPOTK034 **LHC Beam Collimation During Extended Beta*-Levelling in Run 3**
Author: Frederik Florentinus Van der Veken, Roderik Bruce, Michael Hostettler, Daniele Mirarchi, Stefano Redaelli (CERN, Geneva)

WEPOTK035 **Layout of the 12 O'clock Collimation Straight Section for the EIC Hadron Storage Ring**
Author: Guillaume Robert-Demolaize, J. Scott Berg, Kirsten Angelika Drees, Douglas Holmes, Henry Lovelace III, Steve Peggs, Matthieu Valette (BNL, Upton, New York), Bijan Bhandari (Brookhaven National Laboratory (BNL), Upton, New York)

WEPOTK036 **Electron Beam Optimization for FLASH Radiotherapy Experiment at Chiang Mai University**
Author: Kanlayaporn Kongmali, Pittaya Apiwattanakul, Nopadol Kangrang, Sakhorn Rimjaem, Jatuporn Saisut, Chitrlada Thongbai (Chiang Mai University, Chiang Mai), Pathrapol Lithanatudom (IST, Chiang Mai), Monchai Jitvisate (Suranaree University of Technology, Nakhon Ratchasima)

WEPOTK037 **Radiation of a Particle Moving Along a Helical Trajectory in a Resistive-Wall Cylindrical Waveguide**
Author: Michael Ivanyan, Bagrat Grigoryan, Bagrat Sargsyan (CANDLE SRI, Yerevan), Armen Grigoryan (CANDLE SRI, Yerevan; YSU, Yerevan), Klaus Floettmann, Francois Lemery (DESY, Hamburg)

WEPOTK038 **Modes of a Cylindrical Multilayer-Walled Waveguide**
Author: Michael Ivanyan, Lusine Vrezh Aslyan, Bagrat Grigoryan (CANDLE SRI, Yerevan), Armen Grigoryan (CANDLE SRI, Yerevan; YSU, Yerevan), Klaus Floettmann, Francois Lemery (DESY, Hamburg)

WEPOTK039 **Radiation of a Particle Moving Along a Helical Trajectory in a Semi-Infinite Cylindrical Waveguide.**
Author: Michael Ivanyan, Bagrat Grigoryan, Vitali Khachatryan, Bagrat Sargsyan (CANDLE SRI, Yerevan), Armen Grigoryan (CANDLE SRI, Yerevan; YSU, Yerevan), Klaus Floettmann, Francois Lemery (DESY, Hamburg)

WEPOTK040 **Spin-Tracking Simulations in a COSY Model Using Bmad**
Author: Maximilian Vitz (FZJ, Jülich)

WEPOTK043 **Matching Studies Between the CERN PSB and PS Using Turn-by-Turn Beam Profile Acquisitions With a Residual Beam Gas Ionisation Monitor**
Author: Matthew Alexander Fraser, Ana Guerrero, Hampus Sandberg (CERN, Geneva 23), Marcel Roger Coly, Alexander Huschauer, Steen Jensen, Swann Levasseur, Federico Roncarolo, James William Storey (CERN, Geneva), Adriana Rossi (CERN, Meyrin)

WEPOTK044 **Numerical Simulation Study Toward Further Beam Power Ramp-Up at the J-PARC MR**
Author: Hideaki Hotchi, Chihiro Ohmori, Yasuyuki Sugiyama, Takaaki Yasui, Masahito Yoshii (KEK, Tokai, Ibaraki), Susumu Igarashi, Tadashi Koseki, Yoichi Sato (KEK, Ibaraki), Takashi Asami (The University of Tokyo, Tokyo)

WEPOTK045 **Update of Beam Coupling Impedance Evaluation by the Stretched-Wire Method**
Author: Takeshi Toyama, Katsushi Hasegawa, Aine Kobayashi, Takeshi Nakamura, Chihiro Ohmori, Yasuyuki Sugiyama, Masahito Yoshii (KEK, Tokai, Ibaraki), Koji Ishii (J-PARC, KEK & JAEA, Ibaraki-ken), Yoshihiro Shobuda, Fumihiko Tamura (JAEA/J-PARC, Tokai-mura), Tatsunobu Shibata (KEK, Ibaraki), Kotoku Hanamura, Toshihiko Kawachi (Mitsubishi Electric System & Service Co., Ltd, Tsukuba)

WEPOTK046 **Improved Longitudinal Performance of the LHC Beam in the CERN PS**
Author: Heiko Damerau, Valentin Daniel Desquiens, Azeddine Jibar, Alexandre Lasheen, Michele Morvillo, Carlo Rossi, Benjamin Jack Woolley (CERN, Geneva 23), Alexander Huschauer, Bettina Mikulec (CERN, Geneva)

WEPOTK050 **The Report of Machine Studies Related to the Vertical Beam Size Blow-Up in SuperKEKB LER**
Author: Shinji Terui, Hitoshi Fukuma, Yoshihiro Funakoshi, Takuya Ishibashi, Kazuhito Ohmi, Yukiyoshi Ohnishi, Ryuichi Ueki (KEK, Ibaraki), Takeshi Nakamura (KEK, Tokai, Ibaraki)

WEPOTK051 **Beam Induced Power Loss Estimation of a Movable Synchrotron Light Extraction Mirror for the LHC**
Author: Manfred Wendt, William Andreazza, Enrico Bravin, Franck Guillot-Vignot (CERN, Meyrin)

WEPOTK052 **Beam Coupling Impedance Study and Its Database of Siam Photon Source Storage Ring**
Author: Nawin Juntong, Thakonwat Chanwattana, Siriwan Jummunt, Kritsada Kittimanapun, Thanapong Phimsen, Wanisa Promdee, Thapakron Pulampong (SLRI, Nakhon Ratchasima)

WEPOTK053 **BLonD Simulation of Bunch Formation for the Mu2e Experiment**
Author: Keegan Harrig, Eric Prebys (UCD, Davis, California), Vladimir P. Nagaslaev, Steven J. Werkema (Fermilab, Batavia, Illinois)

WEPOTK054 **Experimental Verification of DARHT Axis 1 Injector PIC Simulations**
Author: Alex Press, Michael Andrew Jaworski, David Moir, Sebastian Szustkowski (LANL, Los Alamos, New Mexico)

WEPOTK055 **Beam Lifetime Measurements in Sirius Storage Ring**
Author: Murilo Barbosa Alves, Fernando Henrique de Sá, Lin Liu, Ximenes Rocha Resende (LNLS, Campinas)

WEPOTK056 **Control of the Microbunching Instability in Storage Rings Using Feedback Strategy**
Author: Serge Bielawski, Clement Evain, Fahem Kaoudoune, Eléonore Roussel, Christophe Szwaj (PhLAM/CERLA, Villeneuve d'Ascq), Jean-Blaise Brubach, Nicolas Hubert, Marie Labat, Fernand Ribeiro, Pascale Roy, Marie-Agnès Tordeux (SOLEIL, Gif-sur-Yvette)

WEPOTK057 **Towards Direct Detection of the Shape of CSR Pulses With Fast THz Detectors**
Author: Johannes Leonhard Steinmann, Miriam Brosi [on leave], Erik Bründermann, Akira Mochihashi, Anke-Susanne Mueller, Patrick Schreiber (KIT, Karlsruhe)

WEPOTK058 **Experimental Study of the Transverse Mode Coupling Instability With Space-Charge at the CERN SPS**
Author: Xavier Buffat, Hannes Bartosik (CERN, Geneva)

WEPOTK059 **Suppression of Emittance Growth by a Collective Force: Van Kampen Approach**
Author: Xavier Buffat (CERN, Geneva)

WEPOTK060 **Prospects of Ultrafast Electron Diffraction Experiments in Sealab, Longitudinal Phase-Space Manipulation and Beam Stability**
Author: Benat Alberdi-Esuain, Ji-Gwang Hwang, Axel Neumann, Jens Voelker (HZB, Berlin), Thorsten Kamps (HU Berlin, Berlin; HZB, Berlin)

WEPOTK061 **Lattice Design of the UVSOR_IV Storage Ring**
Author: Elham Salehi, Masaki Fujimoto, Yoshitaka Taira (UVSOR, Okazaki), Masahiro Katoh (HSRC, Higashi-Hiroshima; UVSOR, Okazaki), Lei Guo (Nagoya University, Nagoya)

WEPOTK062 **Intrabunch Motion With Both Impedance and Beam-Beam Using the Circulant Matrix Approach**
Author: Elias Métral, Xavier Buffat (CERN, Geneva)

WEPOTK063 **A Wireless Method to Obtain the Impedance From Scattering Parameters**
Author: Chiara Antuono (CERN, Meyrin), Elias Métral, Carlo Zannini (CERN, Geneva), Mauro Migliorati (CERN, Geneva; LNF-INFN, Frascati), Andrea Mostacci (LNF-INFN, Frascati; Sapienza University of Rome, Rome)

WEPOTK064 **Generating Sub-Femtosecond Electron Beams at Plasma Wakefield Accelerators**
Author: River Robles, Claudio Emma, Rafi Mir-Ali Hessami, Kirk Larsen, Agostino Marinelli (SLAC, Menlo Park, California)

WEPOTK065 **Revisiting Intrabeam Scattering for Laminar Beams**
Author: River Robles, Zhirong Huang, Agostino Marinelli (SLAC, Menlo Park, California)

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WEPOMS - Poster Session - Matsaman

WEPOMS001 **Effect of the Betatron Coupling on the Beam Transverse Instabilities**
Author: Watanyu Foosang, Alexis Gamelin, Ryutaro Nagaoka (SOLEIL, Gif-sur-Yvette)

WEPOMS003 **Stability Limits of RF Systems With Harmonic Cavities**
Author: Alexis Gamelin, Watanyu Foosang, Patrick Marchand, Ryutaro Nagaoka (SOLEIL, Gif-sur-Yvette), Naoto Yamamoto (KEK, Ibaraki)

WEPOMS004 **Investigation of RF Heating for the Multipole Injection Kicker Installed at SOLEIL**
Author: Alexis Gamelin, Patrick Alexandre, Rachid Ben El Fekih, José Da Silva Castro, Moussa El Ajjouri, Antoine Letresor, Laurent Stanislas Nadolski, Randy Ollier, Serge Thoraud (SOLEIL, Gif-sur-Yvette), Massiga Sacko, Stephane Taurines (Avantis Concept, SAINT-CERE)

WEPOMS005 **Simulations of the Micro-Bunching Instability for SOLEIL and KARA Using Two Different VFP Solver Codes**
Author: Miriam Brosi, Anke-Susanne Mueller, Patrick Schreiber (KIT, Karlsruhe), Serge Bielawski, Clement Evain, Eléonore Roussel, Christophe Szwaj (PhLAM/CERCLA, Villeneuve d'Ascq Cedex)

WEPOMS006 **Simulation of the Effect of Corrugated Structures on the Longitudinal Beam Dynamics at KARA**
Author: Sebastian Maier, Miriam Brosi, Akira Mochihashi, Anke-Susanne Mueller, Michael Johannes Nasse, Patrick Schreiber, Markus Schwarz (KIT, Karlsruhe)

WEPOMS007 **Study of the Effectiveness of GPU Acceleration in Solving the Haïssinski Equation**
Author: Jinghao Yang (Shanghai Jiao Tong University, Shanghai), Xueyan Shi, Haisheng Xu (IHEP, Beijing)

WEPOMS008 **Impact of Broad-Band Impedance on Longitudinal Coupled-Bunch Instability Threshold in SPS and HL-LHC**
Author: Ivan Karpov (CERN, Meyrin), Elena Shaposhnikova (CERN, Geneva)

WEPOMS009 **Simulation Studies of Longitudinal Stability for High-Intensity LHC-Type Beams in the CERN SPS**
Author: Danilo Quartullo, Leandro Intelisano, Ivan Karpov, Giulia Papotti (CERN, Meyrin)

WEPOMS010 **Studies of Resistive-Wall and HOM Coupled-Bunch Instabilities for Diamond-Ii**
Author: Siwei Wang, Hung-Chun Chao, Richard Fielder, Ian Martin, Teresia Olsson (DLS, Oxfordshire)

WEPOMS011 **Single Bunch Instability Studies With a New Impedance Lattice for Diamond-II**
Author: Richard Fielder, Hung-Chun Chao, Siwei Wang (DLS, Oxfordshire)

WEPOMS013 **Neural Network Solver for Coherent Synchrotron Radiation Wakefield Calculations in Charged Particle Beams**
Author: Auralee Edelen, Claudio Emma, Christopher Mayes, Ryan Roussel (SLAC, Menlo Park, California)

WEPOMS014 **Wakefield Effects on Dark Current Bunches for LESA**
Author: Sean Thomas Littleton (Stanford University, Stanford, California), Tor Raubenheimer (SLAC, Menlo Park, California)

WEPOMS015 **Basic Relations of Laser-Plasma Interaction in the 3D Relativistic, Non-Linear Regime**
Author: Damien Minenna, Phu Anh Phi Nghiem (CEA-IRFU, Gif-sur-Yvette)

WEPOMS016 **On the (Apparent) Paradox of Space Charge Forces vs Space Charge Effects**
Author: Phu Anh Phi Nghiem (CEA-IRFU, Gif-sur-Yvette)

WEPOMS017 **Space Charge Analysis for Low Energy Photoinjector**
Author: Martina Carillo, Fabio Bosco, Enrica Chiadroni, Lucia Giuliano, Mauro Migliorati, Andrea Mostacci, Luigi Palumbo (Sapienza University of Rome, Rome), Luca Ficcadenti (INFN-Roma, Roma), Luigi Faillace (INFN/LNF, Frascati), Mostafa Behtouei, Bruno Spataro (LNF-INFN, Frascati), Obed Camacho (UCLA, Los Angeles), Atsushi Fukasawa, James Rosenzweig (UCLA, Los Angeles, California)

WEPOMS018 **Minimum Emittance Growth During RF-Phase Slip**

Author: Shane Rupert Koscielniak (TRIUMF, Vancouver)

WEPOMS019 **Beam-Beam Resonance Widths in the HL-LHC, and Reduction by Phasing of Interaction Points**

Author: Yi Lin (Kyle) Gao, Shane Rupert Koscielniak (TRIUMF, Vancouver)

WEPOMS020 **Laser Cooling of Stored Bunched Relativistic Ion Beams**

Author: Sebastian Klammes, Lars Bozyk, Thomas Kuehl, Rodolfo Marcelo Sanchez Alarcon, Peter J. Spiller, Markus Steck, Danyal Ferdinant Alexander Winters (GSI, Darmstadt), Thomas Stoehlker (GSI, Darmstadt; HIJ, Jena; IOQ, Jena), Markus Loeser, Mathias Siebold (HZDR, Dresden), Michael Hans Bussmann (HZDR, Dresden; CASUS, Görlitz), Ulrich Schramm (HZDR, Dresden; TU Dresden, Dresden), Dongyang Chen, Zhongkui Huang, Xinwen Ma, Hanbing Wang, Weiqiang Wen (IMP/CAS, Lanzhou), Gerhard Birkl, Noah Eizenhöfer, Max Horst, Benedikt Langfeld (TU Darmstadt, Darmstadt), Wilfried Nörtershäuser, Thomas Walther (TU Darmstadt, Darmstadt; HFHF, Frankfurt am Main), Nils Kiefer (Universität Kassel, Kassel), Volker Hannen, Ken Ueberholz (Westfälische Wilhelms-Universität Münster, Münster)

WEPOMS021 **Entropy Production and Emittance Growth Due to the Imperfection in Long Periodical Acceleration Chains**

Author: Martin Droba, Oliver Meusel, Holger Podlech (IAP, Frankfurt am Main), Stephan Reimann (GSI, Darmstadt; IAP, Frankfurt am Main)

WEPOMS022 **Detailed Analysis of Transverse Emittance of the FLUTE Electron Bunch**

Author: Thiemo Schmelzer, Erik Bründermann, Anke-Susanne Mueller, Michael Johannes Nasse, Robert Ruprecht, Jens Schaefer, Marcel Schuh, Nigel John Smale, Pawel Wesolowski (KIT, Karlsruhe), Matthias Nabinger (KIT, Eggenstein-Leopoldshafen)

WEPOMS023 **Optimization Studies of Simulated THz Radiation at FLUTE**

Author: Chenran Xu, Erik Bründermann, Anke-Susanne Mueller, Andrea Santamaria Garcia, Jens Schaefer, Markus Schwarz (KIT, Karlsruhe)

WEPOMS024 **Present Status of the Injector at the Compact ERL at KEK**

Author: Olga Alexandrovna Tanaka, Tsukasa Miyajima, Takanori Tanikawa (KEK, Ibaraki)

WEPOMS025 **Injector Design Towards ERL-Based EUV-FEL for Lithography**

Author: Olga Alexandrovna Tanaka, Tsukasa Miyajima, Norio Nakamura, Takanori Tanikawa (KEK, Ibaraki)

WEPOMS026 **L-Band Gun Photoinjector Dynamics Optimization for SHINE**

Author: Han Chen, Yingchao Du, Wenhui Huang, Renkai Li, Chuanxiang Tang, Hanxun Xu, Lianmin Zheng (TUB, Beijing), Bin Gao (IHEP, Beijing), Haixiao Deng, Duan Gu, Qiang Gu, Dong Wang, Meng Zhang (SARI-CAS, Pudong, Shanghai)

WEPOMS027 **Arbitrary Bunch Shaping via Wakefield Tailoring**

Author: Young Dae Yoon, Jaeyu Lee, BongHoon Oh, Seunghwan Shin (PAL, Pohang), Gyeongsu Jang (POSTECH, Pohang)

WEPOMS028 **Electron Beam Shaping Techniques Using Optical Stochastic Cooling**
Author: Austin Dick (Northern Illinois University, DeKalb, Illinois), Philippe Regis-Guy Piot (ANL, Lemont, Illinois; Northern Illinois University, DeKalb, Illinois)

WEPOMS029 **Modeling of the Optical Stochastic Cooling at IOTA using ELEGANT**
Author: Austin Dick (Northern Illinois University, DeKalb, Illinois), Philippe Regis-Guy Piot (ANL, Lemont, Illinois; Northern Illinois University, DeKalb, Illinois), Jonathan Jarvis (Fermilab, Batavia, Illinois)

WEPOMS030 **A Path-Length Stability Experiment for Optical Stochastic Cooling at the Cornell Electron Storage Ring**
Author: Samuel Joseph Levenson, Matthew Benjamin Andorf, Ivan Vasilyevich Bazarov, Vardan Khachatryan, Jared Michael Maxson, David Rubin, Suntao Wang (Cornell University (CLASSE), Ithaca, New York)

WEPOMS031 **Light Path Construction for an Optical Stochastic Cooling Stability Test at the Cornell Electron Storage Ring**
Author: Samuel Joseph Levenson, Matthew Benjamin Andorf, Ivan Vasilyevich Bazarov, David Christopher Burke, Jared Michael Maxson, David Rubin, Suntao Wang (Cornell University (CLASSE), Ithaca, New York)

WEPOMS032 **Simulations of Coherent Electron Cooling With Orbit Deviation**
Author: Jun Ma, Gang Wang (BNL, Upton, New York), Vladimir N. Litvinenko (BNL, Upton, New York; Stony Brook University, Stony Brook)

WEPOMS033 **Collective Effect Analysis and Simulation Tool for Electron Storage Ring Design**
Author: Chao Li, Yong-Chul Chae (DESY, Hamburg)

WEPOMS034 **Relativistic Space-Charge Force Calculation by Interpolation-Based Treecode**
Author: Yi-Kai Kan (DESY, Hamburg), Franz Xaver Kaertner (Deutsches Elektronen Synchrotron (DESY) and Center for Free Electron Science (CFEL), Hamburg), Sabine Le Borne, Jens-Peter Zemke (Hamburg University of Technology, Hamburg)

WEPOMS035 **Harpy: A Fast, Simple and Accurate Harmonic Analysis With Error Propagation**
Author: Lukas Malina (DESY, Hamburg)

WEPOMS036 **Accelerating Linear Beam Dynamics Simulations for Machine Learning Applications**
Author: Oliver Stein, Ilya Agapov, Annika Eichler, Jan Kaiser (DESY, Hamburg)

WEPOMS037 **Microbunching Studies for the FLASH2020+ Upgrade Using a Semi-Lagrangian Vlasov Solver**
Author: Philipp Amstutz, Mathias Vogt (DESY, Hamburg)

WEPOMS039 **Analysis of Xcos Simulation Model for Intensity at Third and Fifth Harmonics Undulator Radiation**
Author: Hussain Jeevakhan (NITTTR, Bhopal), Ganeswar Mishra (Devi Ahilya University, Indore), Kamal Kushwaha, Mahazabeen Syed (RGPV, Bhopal)

WEPOMS040 **Analysis of Pulsed Wire Data for Undulator Characterisation Using Machine Learning Tool Boxes**
Author: Hussain Jeevakhan (NITTTR, Bhopal), Saif Mohd Khan (Devi Ahilya University, Indore), Shreya Mishra (Devi Ahilya Vishwa Vidyalaya, Indore), Hussain Jagirdar (IBM, Bangalore North)

WEPOMS041 **New Geant4 Model of Lepton and Hadron Channeling in Crystals and Its Applications in Accelerator Physics**
Author: Alexei Igorevich Sytov, Laura Bandiera (INFN-Ferrara, Ferrara), Vladimir Ivanchenko (CERN, Geneva; Tomsk State University, Tomsk), Susanna Guatelli, Anatoly Rozenfeld (CMRP, Wollongong), Giuseppe A. Pablo Cirrone, Luciano Pandola (INFN/LNS, Catania), Viktar Haurylavets, Victor Vasilievich Tikhomirov (INP BSU, Minsk), Kihyeon Cho, Soonwook Hwang (KISTI, Daejeon)

WEPOMS042 **Studies of an Injected Electron Bunch Into an Energy Recovery Linac**
Author: Sanae Samsam, Alberto Bacci, Vittoria Petrillo, Marcello Rossetti Conti, Andrea Renato Rossi, Marcel Ruijter, Luca Serafini (INFN-Milano, Milano), Maria Rosaria Masullo, Andrea Passarelli (INFN-Napoli, Napoli), Angelo Bosotti, Rocco Paparella, Daniele Sertore (INFN/LASA, Segrate (MI)), Michele Opromolla (Università degli Studi di Milano, Milano)

WEPOMS043 **UFO, a GPU Code Tailored Toward MBA Lattice Optimization**
Author: Michele Carlà, Manu Canals (ALBA-CELLS Synchrotron, Cerdanyola del Vallès)

WEPOMS045 **Modeling and Mitigation of Long-Range Wakefields for Advanced Linear Colliders**
Author: Fabio Bosco, Martina Carillo, Lucia Giuliano, Mauro Migliorati, Andrea Mostacci, Luigi Palumbo (Sapienza University of Rome, Rome), Luigi Faillace, Anna Giribono (INFN/LNF, Frascati), Enrica Chiadroni, Bruno Spataro, Cristina Vaccarezza (LNF-INFN, Frascati), Obed Camacho (UCLA, Los Angeles), Atsushi Fukasawa, Nathan Majernik, James Rosenzweig (UCLA, Los Angeles, California)

WEPOMS046 **Machine Learning-Based Surrogate Modeling of Muon Beam Ionization Cooling**
Author: Elena Fol, Daniel Schulte (CERN, Meyrin), Chris Rogers (STFC/RAL/ISIS, Chilton, Didcot, Oxon)

WEPOMS047 **Automated Design and Optimization of the Final Cooling for a Muon Collider**
Author: Elena Fol, Daniel Schulte, Bernd Stechauner (CERN, Meyrin), Jochen Schieck (HEPHY, Wien), Chris Rogers (STFC/RAL/ISIS, Chilton, Didcot, Oxon)

WEPOMS048 **A Flexible Online Optimizer for SPS**
Author: Thapakron Pulampong, Natthawut Suradet (SLRI, Nakhon Ratchasima)

WEPOMS049 **ESS RFQ Electromagnetic ,Thermal and Mechanical Fatigue Measurements and Analysis**
Author: Emmanouil Trachanas, Andrea Bignami, Nikolaos Gazis, Bryan Jones, Rihua Zeng (ESS, Lund), Pierrick Hamel, Olivier Piquet (CEA-IRFU, Gif-sur-Yvette), Evangelos Gazis (National Technical University of Athens, Athens), George Fikioris (National Technical University of Athens, Zografou)

WEPOMS051 **Spin Matching for the EIC's Electrons**

Author: JMatthew George Signorelli (Cornell University, Ithaca, New York), Jorg Kewisch (BNL, Upton, New York), James Arthur Crittenden, Georg H. Hoffstaetter (Cornell University (CLASSE), Ithaca, New York)

WEPOMS052 **Impacts of an ATS Lattice on EIC Dynamic Aperture**

Author: Jonathan Unger, James Arthur Crittenden, Georg H. Hoffstaetter (Cornell University (CLASSE), Ithaca, New York), Daniel Marx (BNL, Upton, New York)

WEPOMS053 **Transfer Maps With Spin and Synchrotron Radiation Effects Included**

Author: David Sagan, Georg H. Hoffstaetter (Cornell University (CLASSE), Ithaca, New York), Etienne Forest (KEK, Ibaraki)

WEPOMS054 **First Order Calculation of Spin Precession Quaternions for Bmad Library**

Author: Jacob Marc Asimow, James Arthur Crittenden, Georg H. Hoffstaetter, David Sagan (Cornell University (CLASSE), Ithaca, New York)

WEPOMS055 **Cathode Space Charge in Bmad**

Author: Ningdong Wang (Cornell University, Ithaca, New York), James Arthur Crittenden, Colwyn Gulliford, Georg H. Hoffstaetter, David Sagan (Cornell University (CLASSE), Ithaca, New York), Christopher Mayes (SLAC, Menlo Park, California)

WEPOMS056 **Spin Matching and Monte-Carlo Simulation of Radiative Spin Depolarization in e+e- Storage Rings with Bmad**

Author: Oleksii Beznosov, James Ellison, Klaus Albert Heinemann (UNM-MATH, Albuquerque, New Mexico), James Arthur Crittenden, Georg H. Hoffstaetter, David Sagan (Cornell University (CLASSE), Ithaca, New York), Desmond P. Barber (DESY, Hamburg)

WEPOMS057 **Simulation Studies and Machine Learning Applications at Coherent electron Cooling experiment at RHIC**

Author: Weijian Lin, James Arthur Crittenden, Georg H. Hoffstaetter, Marcus Andrew Sampson (Cornell University (CLASSE), Ithaca, New York), Yichao Jing (BNL, Upton, New York), Kai Shih (SBU, Stony Brook, New York)

Thu, June 16, 2022

Jun 16, 2022 09:00 - 09:30 Oral Session Grand Diamond Ballroom

THIXGD - Invited Orals: Hadron Accelerators

THIXGD1 **High Intensity Beam Accelerator Facilities HIAF and CIADS: Status and Demonstrations of Key Technologies**

Author: Weijian Lin, James Arthur Crittenden, Georg H. Hoffstaetter, Marcus Andrew Sampson (Cornell University (CLASSE), Ithaca, New York), Yichao Jing (BNL, Upton, New York), Kai Shih (SBU, Stony Brook, New York)

Jun 16, 2022 09:30 - 10:30 Oral Session Grand Diamond Ballroom

THOXGD - Contributed Orals: Hadron Accelerators

THOXGD1 **ELENA From Commissioning to Operation**
Author: Laurette Ponce, Lajos Bojtar, Christian Carli, Bruno Dupuy, Pierre Freyermuth, Davide Gamba, Lars Varming Joergensen, Bertrand Lefort, Sergio Pasinelli (CERN, Geneva), Yann Dutheil (CERN, Geneva 23)

THOXGD2 **Electron Cooling Experiment for Proton Beams With Intense Space-Charge in IOTA**
Author: Nilanjan Banerjee, John Brandt (Enrico Fermi Institute, Chicago, Illinois), Brandon Cathey, Sergei Nagaitsev, Giulio Stancari (Fermilab, Batavia, Illinois), Mary Katherine Bossard, Young-Kee Kim (University of Chicago, Chicago, Illinois)

THOXGD3 **Commissioning Status of the Injector of RAON Superconducting Accelerator**
Author: Hyung Jin Kim, Yong Jun Choi, Yeonsei Chung, Jeong Il Heo, In-Seok Hong, Ji-Ho Jang, Dong-O Jeon, Hyunchang Jin, Gi-Dong Kim, Yonghak Kim, Jangwon Kwon, Sangil Lee, Bum-Sik Park, MiJeong Park, Chang Wook Son (IBS, Daejeon), Deok-Min Kim (KUS, Sejong), Eunhoon Lim (Korea University Sejong Campus, Sejong), Seok Ho Moon (UNIST, Ulsan)

Jun 16, 2022 09:00 - 09:30 Oral Session Sapphire 204-205

THIXSP - Invited Orals: Photon Sources and Electron Accelerators

THIXSP1 **A New Compact 3 GeV Light Source in Japan**
Author: Nobuyuki Nishimori (QST, Tokai)

Jun 16, 2022 09:30 - 10:30 Oral Session Sapphire 204-205

THOXSP - Contributed Orals: Photon Sources and Electron Accelerators

THOXSP1 **Low-Alpha Storage Ring Design for Steady-State Microbunching to Generate EUV Radiation**
Author: Zhilong Pan, Xiujie Deng, Wenhui Huang, Chuanxiang Tang, Yao Zhang (TUB, Beijing), Alex Chao (SLAC, Menlo Park, California), Weishi Wan (ShanghaiTech University, Shanghai)

THOXSP2 **Brixsino High-Flux Dual X-Ray and THz Radiation Source Based on Energy Recovery Linacs**
Author: Illya Drebot, Francesco Canella, Simone Cialdi, Marco Giammarchi, Dario Giannotti, Stefano Latorre, Chiara Meroni, Marcello Rossetti Conti, Andrea Renato Rossi, Marcel Ruijter, Sanae Samsam, Luca Serafini, Verardo Torri (INFN-Milano, Milano), Domenico Paparo (CNR-ISASI, Pozzuoi), Riccardo Calandrino, Antonella Delvecchio (HSP, Milan), Paolo Cardarelli, Gianfranco Paternò, Angelo Taibi (INFN-Ferrara, Ferrara), Can Koral, Maria Rosaria Masullo, Andrea Passarelli (INFN-Napoli, Napoli), Alberto Bacci, Michele Bertucci, Angelo Bosotti, Francesco Broggi, Dario Giove, Paolo Michelato, Laura Monaco, Rocco Paparella, Lucio Rossi, Daniele Sertore, Marco Statera (INFN/LASA, Segrate (MI)), Adolfo Esposito (LNF-INFN, Frascati), Rubano Andrea, Andreone Antonello, Piccirillo Bruno, Papari Gianpaolo, Mazaheri Zahra (Naples University Federico II and INFN, Napoli), Rafael Ferragut, Gianluca Galzerano (POLIMI, Milano), Ezio Puppin (Politecnico/Milano, Milano), Giovanni Mettivier, Paolo Russo (UniNa, Napoli), Vittoria Petrillo, Francesco Piero Prelz (Universita' degli Studi di Milano & INFN, Milano), Massimo Sorbi (Universita' degli Studi di Milano & INFN, Segrate), Mauro Citterio (Universita' degli Studi di Milano e INFN, Milano), Maria Pia Abbracchio, Vanzulli Angelo, Bruno Paroli (Universita' degli Studi di Milano, Milano), Carlo Pagani (Università degli Studi di Milano & INFN, Segrate), Stefano Capra, Daniele Cipriani, Cristina Lenardi, Michele Opromolla, Edoardo Suerra, Alberto Torresin (Università degli Studi di Milano, Milano)

THOXSP3 **Path to High Repetition Rate Seeding: Combination of High Gain Harmonic Generation With an Optical Klystron**
Author: Georgia Paraskaki, Eugenio Ferrari, Lucas Schaper, Evgeny Schneidmiller (DESY, Hamburg), Enrico Allaria (Elettra-Sincrotrone Trieste S.C.p.A., Basovizza), Wolfgang Carl Albert Hillert (University of Hamburg, Hamburg)

Jun 16, 2022 11:00 - 11:30 Oral Session Grand Diamond Ballroom

THIYGD - Invited Orals: Beam Instrumentation, Controls, Feedback and Op. Aspects

THIYGD1 **White Rabbit Based Beam-Synchronous Timing System for SHINE**
Author: Yingbing Yan, Guanghua Chen, Qingwen Xiao, PengXiang Yu (SSRF, Shanghai), Yimeng Ye (TUB, Beijing), Guanghua Gong (Tsinghua University, Beijing), Jinliang Gu, Zouyi Jiang, Lei Zhao (USTC, Hefei, Anhui)

Jun 16, 2022 11:30 - 12:30 Oral Session Grand Diamond Ballroom

THOYGD - Contributed Orals: Beam Instrumentation, Controls, Feedback and Op. Aspects

THOYGD1 **Experimental Verification of Several Theoretical Models for ChDR Description**
Author: Kacper Lasocha (Jagiellonian University, Krakow), Stefano Mazzoni (CERN, Geneva), Eugenio Senes (CERN, Geneva 23), Thibaut Lefevre (CERN, Meyrin), Collette Pakuza (Oxford University, Oxford, Oxon), Pavel Karataev (Royal Holloway, University of London, Surrey), Andreas Schloegelhofer (TU Vienna, Wien), Can Davut (The University of Manchester, Manchester)

THOYGD2 **Experimental Slice Emittance Reduction at PITZ Using Laser Pulse Shaping**
Author: Raffael Niemczyk, Zakaria Aboulbanine, Gowri Dulanjalee Adhikari, Namra Aftab, Prach Boonpornprasert, Georgi Zhivkov Georgiev, James David Good, Matthias Gross, Christian Koschitzki, Xiangkun Li, Osip Lishilin, David Melkumyan, Sandeep Kumar Mohanty, Anne Oppelt, Houjun Qian, Seyd Hamed Shaker, Guan Shu, Frank Stephan, Tobias Weilbach (DESY Zeuthen, Zeuthen), Maria Elena Castro Carballo, Mikhail Krasilnikov, Grygorii Vashchenko (DESY, Hamburg), Wolfgang Carl Albert Hillert (University of Hamburg, Hamburg)

THOYGD3 **Online Measurement of Bunch Lengths and Fill-pattern in the PLS-II Storage Ring Using a Fast Photodiode**
Author: Woojin Song (POSTECH, Pohang), Ji-Gwang Hwang (HZB, Berlin), Taekyun Ha, Garam Hahn, Youngdo Joo, Dotae Kim, Yong-Seok Lee, Seunghwan Shin (PAL, Pohang)

Jun 16, 2022 11:00 - 11:30 Oral Session Sapphire 204-205

THIYSP - Invited Orals: Accelerator Technology

THIYSP1 **Development of Advanced Magnets for Modern and Future Synchrotron Light Sources**
Author: Sushil Sharma (BNL, Upton, New York)

Jun 16, 2022 11:30 - 12:30 Oral Session Sapphire 204-205

THOYSP - Contributed Orals: Accelerator Technology

THOYSP1 **Construction and Measurement of a Tuneable Permanent Magnet Quadrupole for Diamond Light Source**
Author: Alexander Bainbridge, Ben Shepherd (STFC/DL/ASTeC, Daresbury, Warrington, Cheshire), Ian Martin, Walter Tizzano (DLS, Oxfordshire), Nicholas Krumpa (STFC/DL, Daresbury, Warrington, Cheshire)

THOYSP2 **The New Eddy Current Type Septum Magnet for Upgrading of Fast Extraction in Main Ring of J-PARC**
Author: Tatsunobu Shibata, Koji Ishii, Soma Iwata, Hiroshi Matsumoto, Takuya Sugimoto (KEK, Ibaraki), Kuanjun Fan (HUST, Wuhan)

THOYSP3 **Progress on the Nb3Sn Superconducting Undulator Development at the Advanced Photon Source**
Author: Ibrahim Kesgin, Efim Gluskin, Quentin Hasse, Yury Ivanyushenkov, Matthew Thomas Kasa, Stephen MacDonald, Yuko Shiroyanagi (ANL, Lemont, Illinois), Emanuela Barzi, Daniele Turrioni, Alexander V. Zlobin (Fermilab, Batavia, Illinois), Diego Arbelaez, Soren Prestemon (LBNL, Berkeley, California)

Jun 16, 2022	14:00 - 15:00	Oral Session	Grand Diamond Ballroom
THAWGD - Awards Session			

Jun 16, 2022	15:00 - 16:00	Oral Session	Grand Diamond Ballroom
THENGD - Entertainment Session			

Jun 16, 2022	16:00 - 18:00	Poster Session	Poster Area Somtum
THPOST - Poster Session - Somtam			

THPOST001 **Temperature Effects on the PETRA III Tunnel Stability**

Author: Michaela Schaumann, Michael Bieler, Joachim Keil, Jens Klute, Lang Liao, Rainer Wanzenberg (DESY, Hamburg)

THPOST003 **Collective Effects Estimates for the Current Damping Ring Design of the FCC-e+e-**

Author: Ozgur Etisken (Ankara University, Ankara), Fanouria Antoniou, Frank Zimmermann (CERN, Meyrin), Antonio De Santis (INFN/LNF, Frascati), Catia Milardi (LNF-INFN, Frascati)

THPOST004 **EIC's Rapid Cycling Synchrotron Spin Tracking Update**

Author: Vahid Houston Ranjbar, Henry Lovelace III, Francois Meot (BNL, Upton, New York), Fanglei Lin (ORNL RAD, Oak Ridge, Tennessee)

THPOST005 **Finalizing the New iRCMS Arc Design. Dynamic and Momentum Acceptance.**

Author: Francois Meot, Piyush Nanubhai Joshi, Nicholaos Tsoupas (BNL, Upton, New York), Joseph Paul Lidestri, Manny Subramanian (Best Medical International, Springfield)

THPOST006 **Simulations of the Suitability of a DC Electron Photogun and S-Band Accelerating Structure as Input to an X-Band Linac**

Author: Scott David Williams, Roger Paul Rassool, Suzanne L. Sheehy, Geoffrey Taylor, Matteo Volpi (The University of Melbourne, Melbourne, Victoria), Rebecca Auchettl, Rohan Dowd (AS - ANSTO, Clayton)

THPOST007 **Slow Control Loop to Stabilize the RF Power of the FLUTE Electron Gun**

Author: Marvin Dennis Noll, Andreas Böhm, John Jelonek, Igor Kriznar, Olena Manzhura, Anke-Susanne Mueller, Robert Ruprecht, Marcel Schuh, Nigel John Smale (KIT, Karlsruhe)

THPOST008 **Status of the FLUTE RF System Upgrade**

Author: Anton Malygin, Anke-Susanne Mueller (KIT, Karlsruhe), Olena Manzhura, Robert Ruprecht, Marcel Schuh, Nigel John Smale (KIT, Eggenstein-Leopoldshafen)

THPOST009 **Design Consideration of Bunch Compressors for an Accelerator-Based IR/THz Source at the European XFEL**
Author: Prach Boonpornprasert, Georgi Zhivkov Georgiev, Mikhail Krasilnikov, Xiangkun Li, Anusorn Lueangaramwong (DESY Zeuthen, Zeuthen)

THPOST010 **The Frascati DAFNE LINAC and the Beam Test Facility (BTF) Setups for Irradiation**
Author: Claudio Di Giulio, Fabio Cardelli, Domenico Di Giovenale (INFN/LNF, Frascati), Bruno Buonomo, Luca Gennaro Foggetta, Daniele Moriggi (LNF-INFN, Frascati)

THPOST011 **SuperKEKB Electron Positron Injector Linac Upgrade for Higher Charge and Lower Emittance**
Author: Kazuro Furukawa, Hiroyasu Ego, Yoshinori Enomoto, Naoko Iida, Takuya Kamitani, Masato Kawamura, Shuji Matsumoto, Toshihiro Matsumoto, Takako Miura, Masanori Satoh, Akihiro Shirakawa, Tsuyoshi Suwada, Mitsuhiro Yoshida (KEK, Ibaraki)

THPOST012 **Achievement of 200,000 Hours of Operation at KEK 7-GeV Electron 4-GeV Positron Injector Linac**
Author: Kazuro Furukawa, Mitsuo Akemoto, Dai Arakawa, Yoshio Arakida, Hiroyasu Ego, Yoshinori Enomoto, Toshiyasu Higo, Hiroyuki Honma, Naoko Iida, Kazuhisa Kakihara, Takuya Kamitani, Hiroaki Katagiri, Masato Kawamura, Shuji Matsumoto, Toshihiro Matsumoto, Hideki Matsushita, Katsuhiko Mikawa, Takako Miura, Fusashi Miyahara, Hiromitsu Nakajima, Takuya Natsui, Yujiro Ogawa, Satoshi Ohsawa, Yuichi Okayasu, Takao Oogoe, Muhammad Abdul Rehman, Itsuka Satake, Masanori Satoh, Yuji Seimiya, Tetsuo Shidara, Akihiro Shirakawa, Hirohiko Someya, Tsuyoshi Suwada, Madoka Tanaka, Di Wang, Yoshiharu Yano, Kazue Yokoyama, Mitsuhiro Yoshida, Takashi Yoshimoto, Rui Zhang, Xiangyu Zhou (KEK, Ibaraki), Yusei Bando (Sokendai, Ibaraki)

THPOST013 **Development of a Detection System for Quasi-Monochromatic THz Pulse by a Spatially Modulated Electron Beam**
Author: Kota Murakoshi, Yuya Koshiba, Yuichi Tadenuma, Peng Wang, Masakazu Washio (Waseda University, Tokyo), Ryunosuke Kuroda (AIST, Tsukuba), Kazuyuki Sakaue (The University of Tokyo, Bunkyo)

THPOST014 **Design of an Optical Cavity for the Enhancement of Coherent THz Pulse From Tilted Electron Beam**
Author: Yuichi Tadenuma, Kota Murakoshi, Peng Wang, Masakazu Washio (Waseda University, Tokyo), Ryunosuke Kuroda (AIST, Tsukuba), Kazuyuki Sakaue (The University of Tokyo, Bunkyo; Waseda University, Tokyo)

THPOST015 **Research and Development of C-Band 6 MeV on-Axis Coupled Standing Wave Accelerating Tube**
Author: Jinghe Yang, Yu Yang (CIAE, Beijing)

THPOST016 **Development Progress of HEPS LINAC**
Author: Cai Meng, Nan Gan, Da-Yong He, Xiang He, Yi Jiao, Jingyi Li, Jindong Liu, Yuemei Peng, Hua Shi, Guan Shu, Shengchang Wang, Ouzheng Xiao, Jingru Zhang, Zhandong Zhang, Zusheng Zhou (IHEP, Beijing), Xiaohan Lu, Xiaojun Nie (IHEP CSNS, Guangdong Province)

THPOST017 **Physical Design of a 10 MeV High Scanning Frequency Irradiation Electron Linear Accelerator**
Author: Shu Zhang, Zhandong Zhang (IHEP, Beijing; UCAS, Beijing), Munawar Iqbal (IHEP,), Yunlong Chi, Jingru Zhang, Zusheng Zhou (IHEP, Beijing)

THPOST018 **The Design of a Second Beamline for the CLEAR User Facility at CERN**

Author: Luke Aidan Dyks (CERN, Meyrin), Roberto Corsini (CERN, Geneva), Pierre Korysko (CERN, Geneva; Oxford University, Oxford, Oxon), Philip Burrows (JAI, Oxford; Oxford University, Oxford, Oxon)

THPOST019 **Generation of Transversely Uniform Bunches from a Gaussian Laser Spot in a Photoinjector for Irradiation Experiments**

Author: Luke Aidan Dyks (Oxford University, Oxford, Oxon), Roberto Corsini, Andrea Latina (CERN, Geneva), Philip Burrows (JAI, Oxford; Oxford University, Oxford, Oxon)

THPOST020 **Visualisation of Pareto Optimal Spaces and Optimisation Solution Selection Using Parallel Coordinate Plots**

Author: Samuel Smith, Robert Apsimon, Graeme Burt, Matthew Southerby (Cockcroft Institute, Lancaster), Sadiq Setiniyaz (Cockcroft Institute, Warrington, Cheshire; Lancaster University, Lancaster)

THPOST021 **Beam Dynamics Simulations of Linear Accelerator for Natural Rubber Vulcanization at Chiang Mai University**

Author: Jatuporn Saisut, Sakhorn Rimjaem, Chitrlada Thongbai (Chiang Mai University, Chiang Mai; ThEP Center, Bangkok), Monchai Jitvisate (Suranaree University of Technology, Nakhon Ratchasima)

THPOST022 **Irradiation Experiments on the X-band Test Area Beamline at SLAC National Accelerator Laboratory**

Author: Emma Snively, Gregory Peter Le Sage, Emilio Alessandro Nanni, Nicole R Neveu, Mohamed Othman, Dennis Thomas Palmer (SLAC, Menlo Park, California), George Wehner (Stanford University, Stanford, California)

THPOST023 **Current Status of the FFA@CEBAF Energy Upgrade Study**

Author: Ryan Michael Bodenstein, Jay Benesch, Alex Bogacz, Kirsten Elizabeth Deitrick, Bamunuvita Randika Gamage, Geoffrey Arthur Krafft, Katheryne Elise Price, Yves Raymond Roblin, Andrei Seryi (JLab, Newport News, Virginia), J. Scott Berg, Stephen Brooks, Dejan Trbojevic (BNL, Upton, New York), Georg H. Hoffstaetter (Cornell University (CLASSE), Ithaca, New York), David Douglas (Douglas Consulting, York, Virginia), Alexander Coxe (JLab, Newport News), Vasiliy Morozov (ORNL RAD, Oak Ridge, Tennessee)

THPOST024 **Dark Current Measurements in the LCLS-II Injector**

Author: Sean Thomas Littleton (Stanford University, Stanford, California), Tor Raubenheimer, Theodore Vecchione, Feng Zhou (SLAC, Menlo Park, California)

THPOST025 **Operational Experience with the Improved VSR DEMO Collimating Shielded Bellow in BESSY II**

Author: Hans-Walter Glock, Volker Dürr, Felix Glöckner, Markus Ries (HZB, Berlin), Adolfo Velez (HZB, Berlin; Technical University Dortmund, Dortmund), Jens Knobloch (HZB, Berlin; University of Siegen, Siegen)

THPOST026 **Design of the Magnetic Shield for VSR DEMO**

Author: Hans-Walter Glock, Prudhvi Anumula, Felix Glöckner, Fabian Pflocksch (HZB, Berlin), Adolfo Velez (HZB, Berlin; Technical University Dortmund, Dortmund), Jens Knobloch (HZB, Berlin; University of Siegen, Siegen)

THPOST027 **Fabrication of Robust Thermal Transition Modules and First Cryogenic Experiment With the Refurbished COLDDIAG**

Author: Hyuk Jin Cha, Nicole Glamann, Andreas Wolfgang Grau, David Saez de Jauregui (KIT, Eggenstein-Leopoldshafen), Anke-Susanne Mueller (KIT, Karlsruhe)

THPOST029 **Upgrade of the Slow Extraction System of the Heidelberg Ion-Beam Therapy Centre's Synchrotron**
Author: Eike Feldmeier, Rainer Cee, Edgar Cristopher Cortés García, Michael Galonska, Thomas Haberer, Marcel Hun, Andreas Peters, Stefan Scheloske, Christian Schoemers (HIT, Heidelberg)

THPOST030 **Laser Instrumentation and Insertion Device Measurement System**
Author: Roma Khullar, Saif Mohd Khan, Ganeswar Mishra (Devi Ahilya University, Indore), Mona Gehlot (MAX IV Laboratory, Lund), Hussain Jeevakhan (NITTTR, Bhopal)

THPOST031 **Crystal Ultra-Slow Extraction of Positrons from DAFNE: the SHERPA Project**
Author: Marco Garattini (LNF-INFN, Frascati)

THPOST032 **R&D of a MoO3 Coated Copper RF Cavity**
Author: Salvatore Macis (La Sapienza University of Rome, Rome), Alessandro D'Elia (CNR-ISM, Trieste), Akinori Irizawa (ISIR, Osaka), Paola De Padova (ISM-CNR, Rome), Augusto Marcelli, Bruno Spataro (LNF-INFN, Frascati), Stefano Lupi (Sapienza University of Rome, Roma), Martina Carillo (Sapienza University of Rome, Rome), Javad Rezvani (Università di Camerino, Camerino), Ivan Davoli, Massimiliano Lucci (Università di Roma II Tor Vergata, Roma)

THPOST033 **Copper Coated by Thin Films of MoO3 to Control the Breakdown Rate**
Author: Alessandro D'Elia (CNR-ISM, Trieste), Nassim Chikhi (CNR-ISASI, Pozzuoi), Nathaniel Lockwood (Directed Energy Directorate, Albuquerque), Carmela Bonavolonta', Berardo Ruggiero, Massimo Valentino (INFN-Napoli, Napoli), Luigi Faillace (INFN/LNF, Frascati), Augusto Marcelli, Bruno Spataro (LNF-INFN, Frascati), Salvatore Macis (La Sapienza University of Rome, Rome), Martina Carillo (Sapienza University of Rome, Rome), Mikhail Lisitskiy (UniNa, Napoli), John Cook, Bill O'Neill, Martin Sparkes (University of Cambridge, Cambridge), Alessandro Cianchi, Matteo Salvato (Università di Roma II Tor Vergata, Roma)

THPOST034 **Development of Magnetic Harmonics Measurement System for Small Aperture Magnets**
Author: Jongmo Hwang, Jungbae Bahng (Korea University Sejong Campus, Sejong), Eun-San Kim (KUS, Sejong)

THPOST035 **Status of the Engineering Design of the Ifmif-Dones High Energy Beam Transport Line and Beam Dump System.**
Author: Daniel Sánchez-Herranz (IREC, Sant Adria del Besos; UGR, Granada), Fernando Arranz, Concepcion Oliver, Ivan Podadera (CIEMAT, Madrid), Philippe Cara (IFMIF/EVEDA, Rokkasho), Oriol Nomen, Manel Sanmarti, Bipin Kumar Singh (IREC, Sant Adria del Besos), Volker Hauer (KIT, Eggenstein-Leopoldshafen), Francisco Ogando (UNED, Madrid)

THPOST037 **Analysis with MECAmaster on the Chain of Design Tolerances for the Target Systems at the European Spallation Source - ESS**
Author: Andrea Bignami, Nikolaos Gazis, Sara Ghatnekar Nilsson (ESS, Lund), Bertrand Nicquevert (CERN, Geneva)

THPOST038 **On-Site Transport and Handling Tests of Cryomodules for the European Spallation Source**
Author: Felix Schlander, Andrea Bignami, Nikolaos Gazis (ESS, Lund)

THPOST039 **SPS Beam Dump System (SBDS) Commissioning After Relocation and Upgrade**
Author: Pieter Van Trappen, Nicolas Voumard (CERN, Geneva), Laurent Ducimetière, Vasco Namora, Viliam Senaj (CERN, Geneva 23), Etienne Carlier, Francesco Maria Velotti (CERN, Meyrin)

THPOST040 **PEGASUS X-Band Harmonic Phase Space Linearization**
Author: Paul Elliot Denham, Alexander Ody (UCLA, Los Angeles)

THPOST041 **Construction and Manufacturing Process of Siam Photon Source II Storage Ring Girder Prototype**
Author: Supawan Srichan, Supat Klinkhieo, Mongkol Phanak, Krerkrit Sittisard (SLRI, Nakhon Ratchasima), Sakonkawee Prabngulueam, Piyawat Pruekthaisong (SLRI, Nakhon-Ratchasima), Oliver Utke (Synchrotron Light Research Institute (SLRI), Muang District)

THPOST042 **Low-Level Radio-Frequency System Integrated with Feedforward Control and Vector Modulation**
Author: Chengcheng Xiao (SINAP, Shanghai), Wencheng Fang, Jianhao Tan, Cheng Wang, Junqiang Zhang (SSRF, Shanghai)

THPOST043 **Ab-Initio Cu Alloy Design for High-Gradient Accelerating Structures**
Author: Gaoxue Wang, Danny Perez, Evgenya I. Simakov (LANL, Los Alamos, New Mexico), Sandra Biedron (UNM-ME, Albuquerque, New Mexico)

THPOST044 **Alkali Antimonide Photocathode Characterization in a High Gradient S-Band Gun**
Author: Chad Pennington, Alice Galdi, Jared Michael Maxson (Cornell University (CLASSE), Ithaca, New York), Luca Cultrera (BNL, Upton, New York; Cornell University (CLASSE), Ithaca, New York), Paul Elliot Denham, Alexander Ody (UCLA, Los Angeles), Pietro Musumeci (UCLA, Los Angeles, California)

THPOST045 **Temperature Dependent Effects on Cband RF Surface Resistivity**
Author: Gerard Emile Lawler, Atsushi Fukasawa, Nathan Majernik, James Rosenzweig (UCLA, Los Angeles, California)

THPOST046 **Cryogenic RF Photocathode Test Bed at UCLA**
Author: Gerard Emile Lawler, Atsushi Fukasawa, Nathan Majernik, Jake Riley Parsons, James Rosenzweig, Yusuke Sakai, Arathi Suraj (UCLA, Los Angeles, California)

THPOST048 **RHIC Machine Protection System Upgrades**
Author: Matthieu Valette, Donald Bruno, Kirsten Angelika Drees, Philip Scott Dyer, Robert Hulsart, Jonathan S. Laster, John Morris, Guillaume Robert-Demolaize, Jon Sandberg, Carl Schultheiss, Travis Shrey, Gage Michael Tustin (BNL, Upton, New York)

Jun 16, 2022 16:00 - 18:00	Poster Session	Poster Area Padthai

THPOPT - Poster Session - Padthai

THPOPT001 **Online Optimization of the EBS Storage Ring Lifetime**
Author: Nicola Carmignani, Lee Robert Carver, Lina Hoummi, Simone Maria Liuzzo, Thomas Perron, Pantaleo Raimondi, Simon Mathieu White (ESRF, Grenoble)

THPOPT002 **Simulations of Power Deposition on the Cryogenic Permanent Magnet Undulator for the ESRF**
Author: Lee Robert Carver, Chamseddine Benabderrahmane, Philipp Brumund, Nicola Carmignani, Gaël Le Bec, Reine Versteegen, Simon Mathieu White (ESRF, Grenoble)

THPOPT003 **Preliminary Implementation of TRIBs in BESSY III's Design Lattice**
Author: Michael Arlandoo, Paul Goslawski, Malte Titze (HZB, Berlin)

THPOPT004 **Design of a Compact 180-Degree Single-Shot Energy Spectrometer Based on a Halbach Dipole Magnet**
Author: Reza Bazrafshan, Timm Rohwer (Deutsches Elektronen Synchrotron (DESY) and Center for Free Electron Science (CFEL), Hamburg), Moein Fakhari, Nicholas Hill Matlis (CFEL, Hamburg), Franz Kaernter (DESY, Hamburg)

THPOPT005 **Field Enhanced, Compact S-Band Gun Employing a Pin Cathode**
Author: Reza Bazrafshan, Timm Rohwer (Deutsches Elektronen Synchrotron (DESY) and Center for Free Electron Science (CFEL), Hamburg), Nicholas Hill Matlis (CFEL, Hamburg), Moein Fakhari, Klaus Floettmann, Franz Kaernter (DESY, Hamburg)

THPOPT006 **Beam Dynamics Observations at Negative Momentum Compaction Factors at KARA**
Author: Patrick Schreiber, Miriam Brosi, Bastian Haerer, Akira Mochihashi, Anke-Susanne Mueller, Alexander Ivanovich Papash, Robert Ruprecht, Marcel Schuh (KIT, Karlsruhe)

THPOPT007 **High Bunch Charges in the Second Injection Beamline of MESA**
Author: Anatolii Kalamaiko, Kurt Aulenbacher, Monika Dehn, Simon Friederich, Christian Philipp Stoll (KPH, Mainz)

THPOPT008 **Beam Orbit Shift Due to BPM Thermal Deformation Using Machine Learning**
Author: Kemin Chen, Masahito Hosaka, Guanliang Wang, Zhe Wang, Wei Xu (USTC/NSRL, Hefei, Anhui), Lei Guo (Nagoya University, Nagoya)

THPOPT009 **STUDY ON THE DEPENDENCY OF BPM READINGS IN THE HLS-II STORAGE RING**
Author: Guanliang Wang, Kemin Chen, Masahito Hosaka, Zhe Wang, Wei Xu (USTC/NSRL, Hefei, Anhui), Siwei Wang (DLS, Oxfordshire), Lei Guo (Nagoya University, Nagoya)

THPOPT010 **Beam Loss Reduction During Energy Ramp-Up at the SAGA-LS**
Author: Yoshitaka Iwasaki (SAGA, Tosu)

THPOPT011 **A Stretching Ring Design for the High Average Current, Very Long Length DC Beam Injection to Steady-State Macrobunching Storage Ring**
Author: Zhilong Pan, Peng-Wei Huang, Wenhui Huang, Renkai Li, Chuanxiang Tang, Xiaoyang Zhang (TUB, Beijing), Alex Chao (SLAC, Menlo Park, California)

THPOPT012 **Compact Accelerator-Based EUV Source Development Using Laser Compton Scattering**
Author: Chong Shik Park - Korea University Sejong Campus

THPOPT013 **Emittance Reduction With the Variable Dipole for the ELETTRA 2.0 Ring**
Author: Axel Poyet (CERN, Geneva), Yannis Papaphilippou (CERN, Meyrin), Manuel Angel Dominguez, Fernando Toral (CIEMAT, Madrid), Raffaella Geometrante, Emanuel Karantzoulis (Elettra-Sincrotrone Trieste S.C.p.A., Basovizza)

THPOPT014 **Simulation and Optimization of SPS-II Linac**
Author: Thakonwat Chanwattana, Somjai Chunjarean, Nawin Juntong, Supat Klinkhieo, Porntip Sudmuang (SLRI, Nakhon Ratchasima), Keerati Manasatitpong (Synchrotron Light Research Institute (SLRI), Muang District)

THPOPT015 **The Design of the Full-Energy Beamline for Experimental Applications (FEBE) on CLARA**
Author: Alexander Bainbridge, Deepa Angal-Kalinin, James Jones, Thomas Hywel Pacey, Yuri Saveliev, Edward William Snedden (STFC/DL/ASTeC, Daresbury, Warrington, Cheshire)

THPOPT016 **Commissioning Simulations for the Diamond-II Upgrade**
Author: Hung-Chun Chao, Richard Fielder, Jonas Kallestrup, Ian Martin, Beni Singh (DLS, Oxfordshire)

THPOPT017 **Orbit Stability Studies for the Diamond-II Storage Ring**
Author: Ian Martin, Colin Andrew Abraham, Davide Crivelli, Hossein Ghasem, Teresia Olsson, Pablo Sanchez Navarro (DLS, Oxfordshire)

THPOPT018 **Aperture Sharing Injection for Diamond-II**
Author: Jonas Kallestrup, Hossein Ghasem, Ian Martin (DLS, Oxfordshire)

THPOPT019 **Multi-Alkali Antimonide Photocathode Development for High Brightness Beams**
Author: Sonal Mistry, Julius Kuehn (HZB, Berlin), Thorsten Kamps (HU Berlin, Berlin; HZB, Berlin), Chen Wang (HZB, Berlin; University Siegen, Siegen)

THPOPT020 **Status and Plans for the New CLS Electron Source Lab**
Author: Mark James Boland, Drew Bertwistle, Frederic Le Pimpec (CLS, Saskatoon, Saskatchewan), Xavier Stragier (TUE, Eindhoven)

THPOPT022 **Study on QE Evolution of Cs2Te Photocathodes in ELBE SRF Gun-II**

Author: Rong Xiang, Andre Arnold, Shuai Ma, Peter Michel, Petr Murcek, Anton Ryzhov, Jana Schaber, Jochen Teichert, Paul Zwartek (HZDR, Dresden)

THPOPT023 **Flexible Features of the Compact Storage Ring in the cSTART Project at Karlsruhe Institute of Technology**

Author: Alexander Ivanovich Papash, Erik Bruendermann, Dima El Khechen, Bastian Haerer, Anke-Susanne Mueller, Robert Ruprecht, Jens Schaefer, Markus Schwarz (KIT, Karlsruhe)

THPOPT024 **MIST - The MESA-Injector Source Two**

Author: Monika Dehn, Paul Simon Plattner (IKP, Mainz), Kurt Aulenbacher (KPH, Mainz; HIM, Mainz; GSI, Darmstadt)

THPOPT025 **Photocathode Stress Test Bench at INFN LASA**

Author: Daniele Sertore, Dario Giove, Laura Monaco (INFN/LASA, Segrate (MI)), Alberto Bacci, Francesco Canella, Simone Cialdi, Illya Drebot, Dario Giannotti, Luca Serafini (INFN-Milano, Milano), Gianluca Galzerano (POLIMI, Milano), Giorgio Guerini Rocco (Università degli Studi di Milano & INFN, Segrate), Daniele Cipriani, Edoardo Suerra (Università degli Studi di Milano, Milano)

THPOPT026 **Assembly and Characterization of Low-Energy Electron Transverse Momentum Measurement Device (TRAMM) at INFN LASA**

Author: Daniele Sertore, Michele Bertucci, Angelo Bosotti, Dario Giove, Laura Monaco, Rocco Paparella (INFN/LASA, Segrate (MI)), Giorgio Guerini Rocco, Carlo Pagani (Università degli Studi di Milano & INFN, Segrate)

THPOPT027 **R&D on High QE Photocathodes at INFN LASA**

Author: Daniele Sertore, Michele Bertucci, Laura Monaco (INFN/LASA, Segrate (MI)), Sandeep Kumar Mohanty, Houjun Qian, Frank Stephan (DESY Zeuthen, Zeuthen), Giorgio Guerini Rocco (Università degli Studi di Milano & INFN, Segrate)

THPOPT028 **Dependence of Csk2sb Photocathode Performance on the Quality of Graphene Substrate Film**

Author: Lei Guo, Keita Goto, Yoshifumi Takashima (Nagoya University, Nagoya), Masahiro Yamamoto (KEK, Ibaraki), Hisato Yamaguchi (LANL, Los Alamos, New Mexico)

THPOPT029 **Study on the Performance Improvement of Alkali Antimonide Photocathodes for Radio Frequency Electron Guns**

Author: Rinto Fukuoka, Kentaro Ezawa, Yuya Koshiba, Masakazu Washio (Waseda University, Tokyo), Kazuyuki Sakaue (The University of Tokyo, Bunkyo)

THPOPT030 **Design Study of 30 MeV Linac for a Compact THz Radiation Source**

Author: Siriwan Jummunt, Somjai Chunjarean, Nawin Juntong, Supat Klinkhieo (SLRI, Nakhon Ratchasima), Keerati Manasatitpong (Synchrotron Light Research Institute (SLRI), Muang District)

THPOPT031 **SUNDAE1: A Liquid Helium Vertical Test-Stand for 2m Long Superconducting Undulator Coils**

Author: Barbara Marchetti, Suren Abeghyan, Johann Eduardo Baader, Sara Casalbuoni, Massimiliano Di Felice, Vanessa Grattoni, Daniele La Civita, Maurizio Vannoni, Mikhail Yakopov, Pawel Ziolkowski (EuXFEL, Schenefeld), Serena Barbanotti, Hans-Joerg Eckoldt, Axel Hauberg, Kay Jensch, Sven Lederer, Lutz Lilje, Rajinikumar Ramalingam, Tobias Schnautz, Rene Zimmermann (DESY, Hamburg), Uwe Englisch (EuXFEL, Hamburg), Andreas Wolfgang Grau (KIT, Karlsruhe)

THPOPT032 **SUNDAE2 at EuXFEL: A Test Stand to Characterize the Magnetic Field of Superconducting Undulators**
Author: Johann Eduardo Baader, Suren Abeghyan, Sara Casalbuoni, Daniele La Civita, Barbara Marchetti, Mikhail Yakopov, Pawel Ziolkowski (EuXFEL, Schenefeld), Hans-Joerg Eckoldt, Axel Hauberg, Sven Lederer, Lutz Lilje, Torsten Wohlenberg, Rene Zimmermann (DESY, Hamburg), Andreas Wolfgang Grau (KIT, Eggenstein-Leopoldshafen)

THPOPT033 **Performance Characterisation at Daresbury Laboratory of Cs-Te Photocathodes Grown at CERN**
Author: Liam Anthony James Soomary (The University of Liverpool, Liverpool), Marcel Himmerlich (CERN, Geneva), Eric Chevallay, Valentin N. Fedosseev, Eduardo Granados, Harsha Panuganti (CERN, Meyrin), Lee Jones, Tim Noakes (Cockcroft Institute, Warrington, Cheshire; STFC/DL/ASTeC, Daresbury, Warrington, Cheshire), Hugh Michael Churn (STFC/DL/ASTeC, Daresbury, Warrington, Cheshire), Carsten Peter Welsch (The University of Liverpool, Liverpool; Cockcroft Institute, Warrington, Cheshire), Christopher Benjamin (University of Warwick, Coventry; STFC/DL/ASTeC, Daresbury, Warrington, Cheshire)

THPOPT034 **Controlled Degradation of a Ag Photocathode by Exposure to Multiple Gases**
Author: Liam Anthony James Soomary (The University of Liverpool, Liverpool), Lee Jones, Tim Noakes (STFC/DL/ASTeC, Daresbury, Warrington, Cheshire; Cockcroft Institute, Warrington, Cheshire), Carsten Peter Welsch (The University of Liverpool, Liverpool; Cockcroft Institute, Warrington, Cheshire)

THPOPT035 **A Second Generation Light Source Aiming at High Power on the Giant Dipole Resonance**
Author: Xavier Buffat, Leon Luis Cuanillon, Eric Nils Kneubuehler (CERN, Geneva)

THPOPT036 **New Microwave Thermionic Electron Gun for Advanced Photon Source Upgrade: Test Results and Operation Experience**
Author: Sergey V Kutsaev, Ronald Agustsson, Aurora Cecilia Araujo Martinez, Robert Douglas Berry, Osvaldo Chimalpopoca, Alex Murokh, Marcos Ruelas, Alexander Yuryevich Smirnov, Seiji Umeda Thielk (RadiaBeam, Santa Monica, California), John E. Hoyt, William Jansma, Ali Nassiri, Yine Sun, Geoff J. Waldschmidt (ANL, Lemont, Illinois)

THPOPT037 **Ceramics Evaluation for MW-power Coaxial Windows, Operating in UHF**
Author: Sergey V Kutsaev, Ronald Agustsson, Paul Carriere, Nanda Gopal Matavalam, Alexander Yuryevich Smirnov, Seiji Umeda Thielk (RadiaBeam, Santa Monica, California), Thomas Wesley Hall, Dongsung Kim, John T.M. Lyles, Kimberley Nichols (LANL, Los Alamos, New Mexico), Andrew Haase (SLAC, Menlo Park, California)

THPOPT038 **Sirius Injection Optimization**
Author: Ximenes Rocha Resende, Murilo Barbosa Alves, Fernando Henrique de Sá, Lin Liu, Ana Clara de Souza Oliveira, Jucelio Vitor Quentino (LNLS, Campinas)

THPOPT039 **Performance Report of the SOLEIL Multipole Injection Kicker**
Author: Randy Ollier, Patrick Alexandre, Rachid Ben El Fekih, Alexis Gamelin, Nicolas Hubert, Marie Labat, Amor Nadji, Laurent Stanislas Nadolski, Marie-Agnès Tordeux (SOLEIL, Gif-sur-Yvette)

THPOPT040 **Injection Using a Non-Linear Kicker at the ESRF**
Author: Simon Mathieu White, Thomas Perron (ESRF, Grenoble)

THPOPT041 **Commissioning of New Kicker Power Supplies to Improve Injection Perturbations at the ESRF**
Author: Simon Mathieu White, Nicola Carmignani, Lee Robert Carver, Marc Dubrulle, Lina Hoummi, Mathieu Morati, Thomas Perron, Benoit Roche (ESRF, Grenoble)

THPOPT042 **Studies for a Laser Wakefield Driven Injector at ELSA**
Author: Kilian Kranz, Klaus Desch, Daniel Elsner, Michael Thomas Switka (ELSA, Bonn)

THPOPT043 **Injection Design Options for the Low-Emittance PETRA IV Storage Ring**
Author: Marc Andre Jebramcik, Ilya Agapov, Sergey A. Antipov, Riccardo Bartolini, Reinhard Brinkmann, Dieter Einfeld, Thorsten Hellert, Joachim Keil, Gregor Loisch, Frank Obier (DESY, Hamburg)

THPOPT044 **Commissioning of an Alkali Metal Photocathode Preparation Facility at Daresbury Laboratory**
Author: Hugh Michael Churn, Lee Jones, Tim Noakes (STFC/DL/ASTeC, Daresbury, Warrington, Cheshire; Cockcroft Institute, Warrington, Cheshire), Christopher Benjamin (STFC/DL/ASTeC, Daresbury, Warrington, Cheshire; University of Warwick, Coventry)

THPOPT045 **OPAL Simulations of the MESA Injection System**
Author: Simon Friederich (IKP, Mainz), Christian Philipp Stoll (KPH, Mainz), Kurt Aulenbacher (KPH, Mainz; HIM, Mainz; GSI, Darmstadt)

THPOPT046 **The Design of the DESY II Booster Synchrotron Proof-of-Principle Experiment for a Crystal-Based Extraction of Electrons**
Author: Alexei Igorevich Sytov, Laura Bandiera, Andrea Mazzolari, Marco Romagnoni (INFN-Ferrara, Ferrara), Heiko Ehrlichmann, Gero Kube, Marcel Stanitzki, Kay Wittenburg (DESY, Hamburg), Mattia Soldani (INFN-Ferrara, Ferrara; UNIFE, Ferrara), Giuseppe A. Pablo Cirrone (INFN/LNS, Catania), Viktar Haurylavets, Victor Vasilievich Tikhomirov (INP BSU, Minsk), Vincenzo Guidi (UNIFE, Ferrara; INFN-Ferrara, Ferrara), Melissa Tamisari (Università di Ferrara, Ferrara)

THPOPT047 **A Double Dipole Kicker for Off and On-Axis Injection for ALBA-II**
Author: Gabriele Benedetti, Michele Carlà, Montserrat Pont (ALBA-CELLS Synchrotron, Cerdanyola del Vallès)

THPOPT048 **Impact of IDs on the Diamond Storage Ring and Application to Diamond-II**
Author: Richard Fielder, Beni Singh (DLS, Oxfordshire)

THPOPT049 **Beam Dynamics Studies for the Diamond-II Injector**
Author: Ian Martin, Richard Fielder, Jonas Kallestrup, Teresia Olsson, Beni Singh (DLS, Oxfordshire), James Jones, Bruno Muratori (STFC/DL/ASTeC, Daresbury, Warrington, Cheshire)

THPOPT050 **Development and Construction of Cryogenic Permanent Magnet Undulators (CPMU) for ESRF-EBS**
Author: Chamseddine Benabderrahmane, Philipp Brumund, Joel Chavanne, Damien Coulon, Gaël Le Bec, Bernard Ogier, Reine Versteegen (ESRF, Grenoble)

THPOPT051 **Robust Design and Control of the Nonlinear Dynamics for BESSY-III**
Author: Johan Bengtsson, Michael Abo-Bakr, Paul Goslawski, Andreas Jankowiak, Bettina Christa Kuske (HZB, Berlin)

THPOPT052 **The Status of the In-Vacuum-APPLE II IVUE32 at HZB / BESSY II**
Author: Johannes Bahrdt, Juergen Bakos, Simon Gaebel, Stefan Gottschlich, Stefan Grimmer, Sebastian Knaack, Carsten Kuhn, Florian Laube, Atoosa Meseck, Christoph Rethfeldt, Ed Christopher Maurice Rial, Annette Rogosch-Opolka, Michael Scheer, Paul Ignatius Volz (HZB, Berlin)

THPOPT053 **Goubau-Line Set Up for Bench Testing Impedance of IVU32 Components**
Author: Paul Ignatius Volz (HZB, Berlin), Atoosa Meseck (HZB, Berlin; KPH, Mainz)

THPOPT056 **Emittance Exchange at Sirius Booster for Storage Ring Injection Improvement**
Author: Jucelio Vitor Quentino, Murilo Barbosa Alves, Fernando Henrique de Sá (LNLS, Campinas)

THPOPT057 **Status of a Prototype HTS Helical Undulator Coil for Compact FELs**
Author: Sebastian C. Richter (CERN, Geneva; KIT, Karlsruhe), Amalia Ballarino (CERN, Geneva), Axel Bernhard, Anke-Susanne Mueller (KIT, Karlsruhe)

THPOPT058 **Status and Powering Test Results of HTS Undulator Coils at 77 K for Compact FEL Designs**
Author: Sebastian C. Richter (CERN, Geneva; KIT, Karlsruhe), Amalia Ballarino, Thomas Henricus Nes, Daniel Schoerling (CERN, Geneva), Axel Bernhard, Anke-Susanne Mueller (KIT, Karlsruhe)

THPOPT059 **Development of a Transfer Line for LPA-Generated Electron Bunches to a Compact Storage Ring**
Author: Bastian Haerer, Erik Bruendermann, Dima El Khechen, Anke-Susanne Mueller, Alexander Ivanovich Papash, Sebastian C. Richter, Robert Ruprecht, Jens Schaefer, Marcel Schuh, Christina Widmann (KIT, Karlsruhe), Andreas R. Maier, Jens Osterhoff, Eva Panofski (DESY, Hamburg), Laurids Jeppe (Deutsches Elektronen Synchrotron (DESY) and Center for Free Electron Science (CFEL), Hamburg), Philipp Messner (University of Hamburg, Hamburg)

THPOPT060 **Tolerance Study on the Geometrical Errors for a Planar Superconducting Undulator**
Author: Vanessa Grattoni, Sara Casalbuoni, Barbara Marchetti (EuXFEL, Schenefeld)

THPOPT061 **European XFEL Undulators - Status and Plans**
Author: Sara Casalbuoni, Suren Abeghyan, Johann Eduardo Baader, Vanessa Grattoni, Suren Karabekyan, Barbara Marchetti, Harald Sinn, Frederik Wolff-Fabris, Mikhail Yakopov, Pawel Ziolkowski (EuXFEL, Schenefeld), Uwe Englisch (EuXFEL, Hamburg)

THPOPT063 **Design of Scilab Xcos Simulation Model for Pulsed Wire Method Data Analyses.**
Author: Hussain Jeevakhan (NITTTR, Bhopal), Saif Mohd Khan, Ganeswar Mishra (Devi Ahilya University, Indore)

THPOPT064 **Hall Probe Magnetic Measurement of 50 mm Period PPM Undulator**
Author: Saif Mohd Khan, Ganeswar Mishra (Devi Ahilya University, Indore), Mona Gehlot (MAX IV Laboratory, Lund), Hussain Jeevakhan (NITTTR, Bhopal)

THPOPT065 **Operation of X-Ray Beam Position Monitors at ALBA Front Ends With Zero BIAS Voltage**
Author: Jordi Marcos, Ubaldo Iriso, Valentí Massana, Raquel Monge, David Yepez (ALBA-CELLS Synchrotron, Cerdanyola del Vallès)

THPOPT066 **Helical Wiggler Design for Optical Stochastic Cooling at CESR.**
Author: Vardan Khachatryan, Matthew Benjamin Andorf, Ivan Vasilyevich Bazarov, James Arthur Crittenden, Samuel Joseph Levenson, Jared Michael Maxson, David Rubin, James P. Shanks, Suntao Wang (Cornell University (CLASSE), Ithaca, New York), William Frederick Bergan (BNL, Upton, New York)

THPOPT067 **Propagation of Gaussian Wigner Function Through a Matrix-Aperture Beamline**
Author: Boaz Nash, Dan Tyler Abell, Paul Moeller, Ilya V. Pogorelov (RadiaSoft LLC, Boulder, Colorado), Nicholas Burke Goldring (STATE33 Inc., Portland, Oregon)

THPOPT068 **Linear Canonical Transform Library for Fast Coherent X-Ray Wavefront Propagation**
Author: Boaz Nash, Dan Tyler Abell, Paul Moeller, Ilya V. Pogorelov (RadiaSoft LLC, Boulder, Colorado), Nicholas Burke Goldring (STATE33 Inc., Portland, Oregon)

Jun 16, 2022 16:00 - 18:00 Poster Session Poster Area Tomyam Kung

THPOTK - Poster Session - Tomyam Kung

THPOTK001 **Variable Permanent Hybrid Magnets for the Bessy III Storage Ring**
Author: Jens Voelker, Volker Dürr, Paul Goslawski, Andreas Jankowiak, Malte Titze (HZB, Berlin)

THPOTK002 **Magnet Design for the PETRA IV Storage Ring**
Author: Riccardo Bartolini, Ilya Agapov, Alexander Aloev, Hans-Joerg Eckoldt, Dieter Einfeld, Bernward Krause, Alexander Petrov, Matthias Thede, Markus Tischer (DESY, Hamburg), Joel Chavanne (ESRF, Grenoble)

THPOTK003 **Optimization of High Mass Resolution Spectrometers and Ion Cooler Perfomance**
Author: Marco Cavenago, Carlo Baltador, Luca Bellan, Michele Comunian, Enrico Fagotti, Alessio Galatà, Mario Maggiore, Andrea Pisent, Carlo Roncolato, Massimo Rossignoli, Alberto Ruzzon (INFN/LNL, Legnaro (PD)), Vincenzo Variale (INFN-Bari, Bari), Giancarlo Maero, Massimiliano Romé (Universita' degli Studi di Milano e INFN, Milano)

THPOTK004 **The Reduction of the Leakage Field of the Injection Septum Magnet in Main Ring of J-PARC**
Author: Tatsunobu Shibata, Koji Ishii, Hiroshi Matsumoto, Noriyuki Matsumoto, Takuya Sugimoto (KEK, Ibaraki)

THPOTK005 **The New High Field Septum Magnet for Upgrading of Fast Extraction in Main Ring of J-PARC**
Author: Tatsunobu Shibata, Koji Ishii, Soma Iwata, Hiroshi Matsumoto, Noriyuki Matsumoto, Takuya Sugimoto (KEK, Ibaraki), Kuanjun Fan (HUST, Wuhan)

THPOTK006 **Experimental Examination on Influence of Magnetic Hysteresis Behavior and Magnetic After Effect of Gap Magnetic Field Generated by Particl Accelerator Electromagnet**
Author: Yoshiki Hane, Kenji Nakamura (Tohoku University, Sendai), Koji Fujiwara (Doshisha University, Kyoto), Kengo Sugahara, Tomoki Urata (Kindai University, Higashiosaka), Yoshihiro Ishi (Kyoto University, Osaka)

THPOTK007 **Magnet Systems for Korea 4GSR Light Source**
Author: Dong Eon Kim, Taekyun Ha, Garam Hahn, YoungGyu Jung, Hong-Gi Lee, Jaeyu Lee, Seunghwan Shin, Hyung Suck Suh (PAL, Pohang)

THPOTK008 **Development of Dipole Magnets for the Storage Ring of the SKIF**
Author: Kseniia Riabchenko, Tatyana Rybitskaya, Alexandr Starostenko, Alexander S. Tsyganov (BINP SB RAS, Novosibirsk)

THPOTK009 **Design of a Permanent Magnet Based Dipole Quadrupole Magnet**
Author: Alex Hinton (STFC/DL, Daresbury, Warrington, Cheshire), Ben Shepherd (Cockcroft Institute, Warrington, Cheshire; STFC/DL/ASTeC, Daresbury, Warrington, Cheshire), Abolfazl Alfie Shahveh (DLS, Oxfordshire), Mirko Kokole, Tadej Milharcic (KYMA, Trieste)

THPOTK010 **Development of a Short Period Superconducting Helical Undulator**
Author: Alex Hinton (STFC/DL, Daresbury, Warrington, Cheshire), Stephen Milward (DLS, Oxfordshire), Ben Shepherd, Neil Thompson (STFC/DL/ASTeC, Daresbury, Warrington, Cheshire), Josef Boehm, Liam Cooper, Ben Green, Tim Hayler, Phillip Jeffery, Craig Macwaters, Barnaby Joel Sewell Matthews (STFC/RAL, Chilton, Didcot, Oxon)

THPOTK011 **Permanent Magnets for the CEBAF 24GeV Upgrade**
Author: Stephen Brooks (BNL, Upton, New York), Alex Bogacz (JLab, Newport News, Virginia)

THPOTK013 **Cold Tests Results of the FAIR Super-FRS First-of-Series Multiplets and Dipoles**
Author: Antonella Chiuchiolo, Anthony Beaumont, Eun Jung Cho, Florian Greiner, Pawel Kosek, Matthias Michels, Hans Mueller, Christian Roux, Haik Simon, Kei Sugita, Vasileios Velonas, Felix Wamers, Martin Winkler, Yu Xiang (GSI, Darmstadt), Hervé Allain, Victor Kleymenov, Arnaud Madur (CEA-IRFU, Gif-sur-Yvette)

THPOTK014 **100 keV Electron Source Design for the New 3 GeV Synchrotron Facility in Thailand**
Author: Nawin Juntong, Sarawut Bootiew, Thakonwat Chanwattana, Chatchabhumi Dhammatong, Siriwan Jummunt, Kritsada Kittimanapun, Wiwek Phacheerak (SLRI, Nakhon Ratchasima), Keerati Manasatitpong (Synchrotron Light Research Institute (SLRI), Muang District)

THPOTK015 **Solid-State Pulsed Power Supply for a 100 keV Electron Source of the New Synchrotron Facility in Thailand**
Author: Wiwek Phacheerak, Sarawut Bootiew, Thakonwat Chanwattana, Chatchabhumi Dhammatong, Nawin Juntong, Kritsada Kittimanapun (SLRI, Nakhon Ratchasima), Keerati Manasatitpong (Synchrotron Light Research Institute (SLRI), Muang District)

THPOTK016 **Considerations Concerning the Use of HTS Conductor for Accelerator Magnets Pole Inductions Above 12 to 15 T**
Author: Michael Green (LBNL, Berkeley, California)

THPOTK017 **Magnetic Measurement and Final Acceptance Test (Fat) for a Conduction-Cooled Hex Superconducting Wiggler**
Author: Toshiya Tanabe, Todd Corwin, David Harder, Dean Andrew Hidas, Marco Musardo, Jim Rank, Michael Seegitz, Robert J. Todd (BNL, Upton, New York)

THPOTK018 **Development and Commissioning of 500 kV/100 mA High Voltage DC Power Supply for Particle Accelerators: Overview, and Challenges**
Author: Ashok Daulatram Mankani, Amardas Alli, Ujjwal K. Baruah, Aritra Chakraborty, Paul Christian, Saurabh Kumar, Amal Soman, Urmil Maheshkumar Thaker (Institute for Plasma Research, Bhat, Gandhinagar)

THPOTK019 **Collider NICA Magnet Power Supply System**
Author: Viktor Karpinsky, Rinat ahmadrizyalov, Sergej Alexandrovich arefev, Andrey Butenko, andrej karavaev, Sergej Valerjevich Kirov, Anastasija Kozlykovskaya, Tatiana Kulaeva, Andrey Osipenkov, Andrej Sergeev, Alexandr Shurygin, Evgeny Syresin, Vladimir Tovstuha, Nikita Travin (JINR, Dubna, Moscow Region), Maxim Kuznetsov (JINR/VBLHEP, Dubna, Moscow region)

THPOTK020 **Recent Experience from the Large-Scale Deployment of Power Converters with Magnet Energy Recovery**
Author: Konstantinos Papastergiou (CERN, Geneva 23), Gilles Le Godec, Valerie Montabonnet (CERN, Geneva)

THPOTK022 **Cryogenic Infrastructure for the Mainz Energy-Recovering Superconducting Accelerator (MESA)**
Author: Timo Stengler, Kurt Aulenbacher, Florian Hug, Paul Simon Plattner, Daniel Simon (KPH, Mainz)

THPOTK023 **Ferrite Specification for the Mu2e 300 kHz and 4.4 MHz AC Dipole Magnets**
Author: Keegan Harrig, Eric Prebys (UCD, Davis, California), Luciano Elementi, Chris C. Jensen, Howard Pfeffer, Dean Alan Still, Iouri Terechkine, Steven J. Werkema, Mayling Wong (Fermilab, Batavia, Illinois)

THPOTK024 **Study and Simulation of Cryogenic Photonic-Band-Gap Structure and Disk-loaded Cavity**
Author: Zihe Gao (SINAP, Shanghai), Cheng Wang (SARI-CAS, Pudong, Shanghai), Wencheng Fang (SSRF, Shanghai)

THPOTK025 **Heat Loads Measurement Methods for the ESS Elliptical Cryomodules SAT at Lund Test Stand**
Author: Nuno Elias, Xiaotao Su (ESS, Lund), Wawrzyniec Gaj, Pawel Halczynski, Michal Sienkiewicz, Filip Daniel Skalka (IFJ-PAN, Kraków)

THPOTK026 **Development and Test of a Program for Automatic Conditioning Room Temperature Cavities**
Author: Klaus Kümpel, Maximilian Maercz, Alexander Rueffer, Christopher Wagner, Stephan Wagner (IAP, Frankfurt am Main), Holger Podlech (IAP, Frankfurt am Main; HFHF, Frankfurt am Main)

THPOTK027 **Temperature Dependent Effects on Quality Factor in C-band RF Oscillators**
Author: Jake Riley Parsons, Atsushi Fukasawa, Gerard Emile Lawler, Nathan Majernik, James Rosenzweig (UCLA, Los Angeles, California)

THPOTK028 **DYVACS (DYnamic VACuum Simulation) code: Calculation of Gas Density Profiles in Present and Future Particle Colliders**
Author: Suheyla Bilgen, Bruno Mercier, Gaël Sattonnay (Université Paris-Saclay, CNRS/IN2P3, IJCLab, Orsay)

THPOTK029 **Role of Surface Chemistry in Conditioning of Materials in Particle Accelerators**
Author: Gaël Sattonnay, Suheyla Bilgen, Serge Della Negra, David Longuevergne, Bruno Mercier, Isabelle Ribaud (Université Paris-Saclay, CNRS/IN2P3, IJCLab, Orsay)

THPOTK030 **Influence of Copper Oxides on the Conditioning of the LHC Copper Beam Screen**
Author: Gaël Sattonnay, Suheyla Bilgen, Bruno Mercier (Université Paris-Saclay, CNRS/IN2P3, IJCLab, Orsay)

THPOTK031 **NEG Coating for PETRA IV Undulator Chamber Prototypes: Challenges and First Results**
Author: Ruta Sirvinskaite, Ralph Bospflug, Antonios Foskolos, Sven Lederer, Lutz Lilje, Nils Plambeck, Marco Schroeder (DESY, Hamburg)

THPOTK032 **A Vacuum System for the Milliampere Booster**
Author: Robert Gerd Heine, Christoph Lukas Lorey (KPH, Mainz)

THPOTK033 **Formation of Ultrahigh Vacuum in NICA Booster and Collider**
Author: Artem Galimov, Andrey Butenko, Alexei Nikolaevich Svidetelev, Evgeny Syresin (JINR, Dubna, Moscow Region), Alexander Tikhomirov (JINR/VBLHEP, Dubna, Moscow region)

THPOTK034 **Vacuum System Performance of the 3 GeV Electron Storage Ring at MAX IV Laboratory**
Author: Marek Jerzy Grabski, Eshraq Al-Dmour, Simone Maria Scolari (MAX IV Laboratory, Lund)

THPOTK035 **Thermo-Mechanical Modelling and Thermal Performance Analysis of Beam Vacuum Line Interconnections and Cold Warm Transitions in HL-LHC Long Straight Section Magnets**
Author: Jérôme Harray, Cedric Garion, Valentine Petit (CERN, Geneva)

THPOTK036 **Determination of Pumping and Dynamic Vacuum Properties of Conductive Quaternary Alloy of TiZrVAg Non-Evaporable Getter.**
Author: Reza Valizadeh, Adrian Hannah, Oleg B. Malyshev (STFC/DL/ASTeC, Daresbury, Warrington, Cheshire), Montserrat Pont, Nikki Diala Tagdulang (ALBA-CELLS Synchrotron, Cerdanyola del Vallès), Gao-Yu Hsiung (NSRRC, Hsinchu), Vinod Dhanak (The University of Liverpool, Liverpool), Juan Manuel O'Callaghan Castella (Universitat Politécnica de Catalunya, Barcelona)

THPOTK037 **Measurement of the Photon Stimulated Desorption for Various Vacuum Tubes at a Beam Line of TLS**
Author: Gao-Yu Hsiung, Chia-Mu Cheng (NSRRC, Hsinchu), Reza Valizadeh (STFC/DL/ASTeC, Daresbury, Warrington, Cheshire)

THPOTK038 **Electron Stimulated Desorption From a Titanium Tube**
Author: Oleg B. Malyshev, Reza Valizadeh (STFC/DL/ASTeC, Daresbury, Warrington, Cheshire)

THPOTK039 **The Effect of Activation Temperature and Duration on the Performance of NEG Thin Films**
Author: Eleni Anne-Marie Marshall, Oleg B. Malyshev, Reza Valizadeh (STFC/DL/AS-TeC, Daresbury, Warrington, Cheshire)

THPOTK040 **Few-Nanosecond Stripline Kickers for Top-Up Injection into PETRA IV**
Author: Gregor Loisch, Vitalij Belokurov, Frank Obier (DESY, Hamburg)

THPOTK041 **Development of Fast Correction Kicker Drivers for Long Pulse Superconducting Electron Linacs**
Author: Jan Lukas Teichgräber, Winfried Decking, Joachim Kahl, Frank Obier (DESY, Hamburg)

THPOTK042 **Non Linear Phenomena Studies in High-Gradient RF Technology for Hadrontherapy at IFIC**
Author: Pablo Martinez-Reviriego, Cesar Blanch Gutierrez, Daniel Esperante Pereira, Juan Fuster, Nuria Fuster-Martinez, Benito Gimeno, Daniel Gonzalez-Iglesias, Pablo Martín-Luna (IFIC, Valencia)

THPOTK043 **Mitigation of High Voltage Breakdown of the Beam Screen of a CERN SPS Injection Kicker Magnet**
Author: Michael John Barnes, Wolfgang Bartmann, Miguel Diaz Zumel, Laurent Ducimetière, Luis Miguel Coralejo Feliciano, Thomas Kramer, Vasco Namora, Tobias Stadlbauer, Dylan Standen, Pavlina Trubacova (CERN, Geneva 23), Francesco Maria Velotti, Carlo Zannini (CERN, Meyrin)

THPOTK044 **Ultra-Fast Generator for Impact Ionization Triggering**
Author: Alicia Ana del Barrio Montañés, Yann Dutheil, Thomas Kramer, Viliam Senaj (CERN, Geneva 23), Martin Sack (KIT, Karlsruhe)

THPOTK045 **Branch Module for an Inductive Voltage Adder for Driving Kicker Magnets With a Short Circuit Termination**
Author: Johannes Ruf, Yann Dutheil (CERN, Geneva 23), Michael John Barnes, Thomas Kramer (CERN, Meyrin), Martin Sack (KIT, Karlsruhe)

THPOTK046 **Design, Fabrication and Cold-Test of an X-Band Accelerating Structure for DCLS**
Author: Xiaoxia Huang, Cheng Wang (SARI-CAS, Pudong, Shanghai), Zongbin Li (DICP, Dalian, Liaoning), Wencheng Fang, Jianhao Tan (SSRF, Shanghai)

THPOTK048 **Radiation Load Studies for the FCC-ee Positron Source with a Superconducting Matching Device**
Author: Barbara Humann (TU Vienna, Wien; CERN, Meyrin), Andrea Latina, Yongke Zhao (CERN, Geneva), Anton Lechner (CERN, Meyrin), Bernhard Auchmann, Jaap Kosse (PSI, Villigen PSI), Iryna Chaikovska, Salim Ogur (Université Paris-Saclay, CNRS/IN2P3, IJCLab, Orsay)

THPOTK049 **Irradiation of Low-Z Carbon-Based Materials with 440 GeV/c Proton Beam for High Energy & Intensity Beam Absorbers: The CERN HiRadMat-56-HED Experiment**
Author: Pablo Andreu Muñoz (CERN, Geneva 23), Nikolaos Charitonidis, Ahmed Cherif, Alexander Michael Krainer, Francois-Xavier Nuiry (CERN, Geneva), Marco Calviani, Edoardo Maria Farina, Anton Lechner, Jorge Maestre, Regis Seidenbinder, Claudio Torregrosa (CERN, Meyrin), Pascal Simon (TU Darmstadt, Darmstadt)

THPOTK050 **CFD Studies of the Convective Heat Transfer Coefficients and Pressure Drops in Geometries Applied to Water Cooling Channels of the Crotch Absorbers of ALBA Synchrotron Light Source**
Author: Stefania Grozavu, Gustavo Adolfo Raush (ESEIAAT, Terrassa), Joan Josep Casas, Carles Colldelram, Marcos Quispe (ALBA-CELLS Synchrotron, Cerdanyola del Vallès)

THPOTK051 **Corrosion of Copper Components in the Deionized Water Cooling System of ALBA Synchrotron Light Source: Current Research Status and Challenges**
Author: Marcos Quispe, Esther Ayas, Joan Josep Casas, Carles Colldelram, Maria Lluïsa Fuentes, Jordi Iglesias (ALBA-CELLS Synchrotron, Cerdanyola del Vallès), Alex Garcia (La Romanica, Barberà del Vallès, Sabadell)

THPOTK052 **Muon Collider Graphite Target Studies and Demonstrator Layout Possibilities at CERN**
Author: Francisco Javier Saura Esteban, Pablo Andreu Muñoz, Daniele Calzolari, Rui Franqueira Ximenes, Alexander Michael Krainer (CERN, Geneva 23), Marco Calviani, Anton Lechner, Roberto Losito, Daniel Schulte (CERN, Meyrin), Chris Rogers (STFC/RAL/ISIS, Chilton, Didcot, Oxon)

THPOTK053 **Solid-State Sample Delivery for High Repetition Rate XFELs**
Author: Nathan Majernik, Nicholas Inzunza, Pratik Manwani, James Rosenzweig (UCLA, Los Angeles, California), Ronald Agustsson, Adam Moro (RadiaBeam, Santa Monica, California), Uwe Bergmann, Aliaksei Halavanau, Claudio Pellegrini (SLAC, Menlo Park, California), Ryan Ash, Noah Welke (UW-Madison/PD, Madison, Wisconsin)

THPOTK054 **Proposal of a VHEE Linac for FLASH radiotherapy**
Author: Lucia Giuliano, Fabio Bosco, Daniele De Arcangelis, Luca Ficcadenti, Daniele Francescone, Gaia Franciosini, Mauro Migliorati, Luigi Palumbo, Vincenzo Patera (Sapienza University of Rome, Rome), Maria Giuseppina Bisogni, Fabio Di Martino, Jake Harold Pensavalle (INFN-Pisa, Pisa), David Alesini, Alessandro Gallo, Alessandro Vannozzi (INFN/LNF, Frascati), Giuseppe A. Pablo Cirrone, Giacomo Cuttone, Giuseppe Torrisi (INFN/LNS, Catania), Vincent Favaudon, Annalisa Patriarca (Institut Curie - Centre de Protonthérapie d'Orsay, Orsay), Sophie Heinrich (Institut Curie, Orsay), Mostafa Behtouei, Luigi Faillace, Bruno Spataro (LNF-INFN, Frascati), Andrea Mostacci (LNF-INFN, Frascati; Sapienza University of Rome, Rome)

THPOTK057 **Vibration Measurements for RFQ Commissioning at ESS**
Author: Emmanouil Trachanas, Andrea Bignami, Nikolaos Gazis, Bryan Jones (ESS, Lund)

THPOTK058 **CERN's East Experimental Area: A New Modern Physics Facility**
Author: Sebastien Evrard, Michael Lazzaroni (CERN, Meyrin), Dipanwita Banerjee, Johannes Bernhard, Filipa Carvalho, Salvatore Danzeca, Bastien Rae, Giulia Romagnoli (CERN, Geneva)

THPOTK059 **Laser System for RF Gun in SuperKEKB Phase III Commissioning**
Author: Rui Zhang, Mitsuhiro Yoshida, Xiangyu Zhou (KEK, Ibaraki), Hiroki Kumano, Naoyuki Toyotomi (Mitsubishi Electric System & Service Co., Ltd, Tsukuba)

THPOTK060 **Post-Acceleration of Laser Driven Ion Beams Using Slow Wave Structures**
Author: Yuze Li, Hao Cheng, Dongyu Li, Chen Lin, Minjian Wu, Xueqing Yan, Yang Yan, Tong Yang (PKU, Beijing)

THPOTK061 **Machine Learning Approach to Temporal Pulse Shaping for the Photoinjector Laser at CLARA**
Author: Amelia Elizabeth Pollard, David Dunning, William Okell, Edward William Snedden (STFC/DL/ASTeC, Daresbury, Warrington, Cheshire)

THPOTK062 **Thermal Modeling and Benchmarking of Crystalline Laser Amplifiers**
Author: Dan Tyler Abell, David Leslie Bruhwiler, Paul Moeller, Robert Nagler, Boaz Nash, Ilya V. Pogorelov (RadiaSoft LLC, Boulder, Colorado), Qiang Chen (LBNL, Berkeley), Cameron Guy Robinson Geddes, Csaba Toth, Jeroen van Tilborg (LBNL, Berkeley, California), Nicholas Burke Goldring (STATE33 Inc., Portland, Oregon)

THPOTK063 **Open Source Software to Simulate Ti:Sapphire Amplifiers**
Author: David Leslie Bruhwiler, Dan Tyler Abell, Paul Moeller, Robert Nagler, Boaz Nash (RadiaSoft LLC, Boulder, Colorado), Qiang Chen (LBNL, Berkeley), Cameron Guy Robinson Geddes, Csaba Toth, Jeroen van Tilborg (LBNL, Berkeley, California), Nicholas Burke Goldring (STATE33 Inc., Portland, Oregon)

THPOTK064 **Noncolinear Synthesis of Picosecond Flat-Top Laser Pulses to Increase Electron Photoinjector Brightness**
Author: Randy Lemons, Sergio Carbajo, Joseph Patrick Duris, Agostino Marinelli, Nicole R Neveu (SLAC, Menlo Park, California), Charles Durfee (Colorado School of Mines, Golden), Shukui Zhang (JLab, Newport News, Virginia)

Jun 16, 2022 16:00 - 18:00 Poster Session Poster Area Matsaman

THPOMS - Poster Session - Matsaman

THPOMS001 **TURBO: A Novel Beam Delivery System enabling Rapid Depth Scanning for Charged Particle Therapy**
Author: Jacinta Yap, Suzanne L. Sheehy (The University of Melbourne, Melbourne, Victoria), Robert Appleby, Hannah Norman, Adam F. Steinberg (UMAN, Manchester)

THPOMS002 **Proton Gantry Beam-Line Commissioning at the Medaustron Ion Therapy Center**
Author: Mauro Torino Francesco Pivi, Laurids Adler, Greta Guidoboni, Gregor Kowarik, Christoph Kurfuerst, Clemens Maderböck, Dale Prokopovich, Ivan Strasik (EBG MedAustron, Wr. Neustadt), Marco Giuseppe Pullia (CNAO Foundation, Pavia), Valeria Rizzoglio (PSI, Villigen PSI), Marius Pavlovic (STU, Bratislava)

THPOMS003 **Upgrade of a Proton Therapy Eye Treatment Nozzle Using a Cylindrical Beam Stopping Device for Enhanced Dose Rate Performances**
Author: Eustache Gnacadja, Nicolas Pauly, Eliott Ramoisiaux, Robin Tesse, Marion Vanwelde (ULB, Bruxelles), Cédric Hernalsteens (CERN, Meyrin; ULB, Bruxelles)

THPOMS004 **Achromatic Gantry Design Using Fixed-Field Spiral Combined-Function Magnets**
Author: Robin Tesse, Eustache Gnacadja, Nicolas Pauly, Eliott Ramoisiaux, Marion Vanwelde (ULB, Bruxelles), Cédric Hernalsteens (CERN, Meyrin; ULB, Bruxelles)

THPOMS005 **Lab-Industry Collaboration: Industrialisation of A Novel Non-Interceptive Turn-Key Diagnostic System for Medical Applications**
Author: Sudharsan Srinivasan, Hervé Bayle, Etienne Touzain (BERGOZ Instrumentation, Saint Genis Pouilly), Danilo Bisiach, Manuel Cargnelutti, Katarina Roskar (I-Tech, Solkan), Pierre-Andre Duperrex (PSI, Villigen PSI)

THPOMS006 **A Carbon Minibeam Irradiation Facility Concept**

Author: Michael Mayerhofer, Guenther Dollinger, Matthias Alois Sammer (Universitaet der Bundeswehr Muenchen, Neubiberg), Vittorio Bencini (CERN, Geneva)

THPOMS007 **Beam Diagnostics for FLASH RT in the Varian ProBeam System**

Author: Manuel Schedler, Simon Busold (VMS-PT, Troisdorf), Martin Braeuer (Siemens Med, Erlangen)

THPOMS008 **Physics Design of Electron Flash Radiation Therapy Bemaline at PITZ**

Author: Xiangkun Li, Zakaria Aboulbanine, Zohrab Amirkhanyan, Matthias Gross, Mikhail Krasilnikov, Anusorn Lueangaramwong, Raffael Niemczyk, Anne Oppelt, Sebastian Philipp, Houjun Qian, Frank Stephan (DESY Zeuthen, Zeuthen), Gregor Loisch, Frank Obier, Michael Schmitz (DESY, Hamburg)

THPOMS009 **FLASHlab@PITZ: New R&D Platform with Unique Capabilities for Electron FLASH and VHEE Radiation Therapy and Radiation Biology under Preparation at PITZ**

Author: Frank Stephan, Zakaria Aboulbanine, Zohrab Amirkhanyan, James David Good, Matthias Gross, Mikhail Krasilnikov, Xiangkun Li, Raffael Niemczyk, Anne Oppelt, Sebastian Philipp, Houjun Qian, Felix Riemer, Christian Stegmann, Steven Worm (DESY Zeuthen, Zeuthen), Cristina Oancea, Jiri Pivec (ADVACAM s.r.o, Prague), Gohar Vasili Tsakanova (CANDLE SRI, Yerevan), Ron Leavitt, Marie-Catherine Vozenin (CHUV, Lausanne), Volker Budach, David Kaul (Charité Centrum für Tumormedizin, Berlin), Wim Leemans, Gregor Loisch, Frank Obier, Michael Schmitz, Tobias Schnautz, Hans Weise (DESY, Hamburg), Andreas Schüller (PTB, Braunschweig), Marcus Frohme, Anna Grebinyk (TH Wildau, Wildau), Judith Reindl (Universitaet der Bundeswehr Muenchen, Neubiberg), Florian Josef Gruener, Theresa Staufer (University of Hamburg, Hamburg), Vincent Henrique Ehrhardt (Universitätsklinikum Hamburg-Eppendorf, Hamburg), Angeles Faus-Golfe (Université Paris-Saclay, CNRS/IN2P3, IJCLab, Orsay)

THPOMS010 **Heating and Beam Impact of High Intensity Exit Windows for FLASHlab@PITZ**

Author: Zohrab Amirkhanyan (CANDLE SRI, Yerevan), Zakaria Aboulbanine, Matthias Gross, Mikhail Krasilnikov, Thorsten Kuhl, Xiangkun Li, Raffael Niemczyk, Anne Oppelt, Sebastian Philipp, Houjun Qian, Frank Stephan (DESY Zeuthen, Zeuthen), Michael Schmitz (DESY, Hamburg)

THPOMS011 **Beam Optics Studies for a Novel Gantry for Hadrontherapy**

Author: Enrico Felcini, Guglielmo Frisella, Alessio Mereghetti, Marco Giuseppe Pullia, Simone Savazzi (CNAO Foundation, Pavia), Mauro Torino Francesco Pivi (EBG MedAustron, Wr. Neustadt), Elena Benedetto (SEEIIST, Geneva)

THPOMS012 **Explorative Studies of an Innovative Superconducting Gantry**

Author: Marco Giuseppe Pullia, Marco Donetti, Enrico Felcini, Guglielmo Frisella, Alessio Mereghetti, Andrea Pella, Simone Savazzi (CNAO Foundation, Pavia), Luca Dassa, Mikko Karppinen, Diego Perini, Davide Tommasini (CERN, Geneva), Maurizio Vretenar (CERN, Meyrin), Alfredo Mirandola (CNAO Foundation, Milan), Christoph Kurfuerst, Mauro Torino Francesco Pivi, Markus Stock (EBG MedAustron, Wr. Neustadt), Samuele Mariotto, Marco Prioli (INFN-Milano, Milano), Ernesto De Matteis, Lucio Rossi (INFN/LASA, Segrate (MI)), Lucia Sabbatini, Alessandro Vannozzi (LNF-INFN, Frascati), Luca Piacentini, Andris Ratkus, Toms Torims, Janis Vilcans (Riga Technical University, Riga), Elena Benedetto (SEEIIST, Geneva), Stefano Uberti (Università di Brescia, Brescia)

THPOMS013 **Electron Gun System Design for FLASH Radiotherapy**

Author: Heung-Soo Lee, Junhee Jang, Kye-Yong Jang, Jacheol Koo, Hyunseok Shin, Dongho Yu (VITZRONEXTECH, Ansan-si, Gyeonggi-do), Dong Hyun An, Sang Hyoun Choi, Kun Uk Kang, Geun-Beom Kim, Jeong Hwan Kim (KIRAMS, Seoul), Yoon-Gyu Son (PAL, Pohang)

THPOMS014 **Results of the First Sr-82 Radioisotope Production and Rb-82 Generator Column Development Using a 100-MeV Proton Linear Accelerator in KOMAC**

Author: Kye-Ryung Kim, Yeong Su Ha, Hyeok-Jung Kwon, Pilsoo Lee, Yeon-Ji Lee, Young-Gi Song, Sang-Pil Yun (KOMAC, KAERI, Gyeongju), Yong-Sub Cho (KAERI, Daejon)

THPOMS015 **New Design of Cyclotron for Proton Therapy**

Author: Oleg Karamyshev (JINR, Dubna, Moscow Region)

THPOMS016 **A New Design of PET Cyclotron**

Author: Oleg Karamyshev (JINR, Dubna, Moscow Region)

THPOMS017 **MSC230 Superconducting Cyclotron for Proton Therapy**

Author: Oleg Karamyshev, Karen Stepanovich Bunyatov, Semion Gurskiy, Gamlet Georgievich Hodshibagijan, Galina Karamysheva, Dmitry Nikiforov, Mikhail Novikov, Dmitry Popov, Victor Romanov, Grigori Shirkov, Stepan Shirkov, Alexandra Sinitsa, Grigoriy Trubnikov, Sergey Yakovenko (JINR, Dubna, Moscow Region), Vladimir Adrianovich Gerasimov, Ivan Lyapin, Vladimir Malinin (JINR/DLNP, Dubna, Moscow region)

THPOMS018 **Study of Coil Configuration and Local Optics Effects for the GaToroid Ion Gantry Design**

Author: Ewa Oponowicz, Luca Bottura, Alexander Gerbershagen, Ariel Haziot (CERN, Geneva), Yann Dutheil (CERN, Geneva 23)

THPOMS019 **Slow Extraction Modelling for NIMMS Hadron Therapy Synchrotrons**

Author: Rebecca Louise Taylor (CERN, Geneva), Jaroslaw Pasternak (Imperial College of Science and Technology, London), Elena Benedetto, Mariusz Sapinski (SEEIIST, Geneva)

THPOMS020 **Beam Optics Study for a Potential VHEE Beam Delivery System**

Author: Cameron Stewart Robertson, Philip Burrows (JAI, Oxford), Alexander Gerbershagen, Andrea Latina (CERN, Geneva), Manjit Dosanjh (CERN, Meyrin)

THPOMS021 **A Compact Synchrotron for Advanced Cancer Therapy With Helium and Proton Beams**

Author: Maurizio Vretenar, Maria Elena Angoletta, Kristaps Palskis (CERN, Meyrin), Luca Bottura, Rebecca Louise Taylor (CERN, Geneva), Jan Borburgh, Gerard Tranquille (CERN, Geneva 23), Giovanni Bisoffi (INFN/LNL, Legnaro (PD)), Mariusz Sapinski (PSI, Villigen PSI), Elena Benedetto (SEEIIST, Geneva)

THPOMS022 **Production of Radioisotopes for Cancer Imaging and Treatment With Compact Linear Accelerators**
Author: Maurizio Vretenar, Aristeidis Mamaras (CERN, Meyrin), Panagiota Foka (GSI, Darmstadt), Giovanni Bisoffi (INFN/LNL, Legnaro (PD))

THPOMS023 **Design of the 590mev Proton Beam Line for the Proposed TATTOOS Isotope Production Target at PSI**
Author: Marco Hartmann, Daniela Candida Kiselev, Davide Reggiani, Mike Seidel, Jochem Snuverink, Hui Zhang (PSI, Villigen PSI)

THPOMS024 **A Novel Intensity Compensation Method to Achieve Energy Independent Beam Intensity at the Patient Location for Cyclotron Based Proton Therapy Facilities**
Author: Vivek Maradia (ETH, Zurich; PSI, Villigen PSI), Antony John Lomax, David Meer, Serena Psoroulas, Damien Charles Weber (PSI, Villigen PSI)

THPOMS025 **A Novel Method of Emittance Matching to Increase Beam Transmission for Cyclotron Based Proton Therapy Facilities**
Author: Vivek Maradia (PSI, Villigen PSI; ETH, Zurich), Antony John Lomax, David Meer, Serena Psoroulas, Jacobus Maarten Schippers, Damien Charles Weber (PSI, Villigen PSI)

THPOMS026 **Monte Carlo Simulation of Electron Beam in Phantom Water for Radiotherapy Application**
Author: Pittaya Apiwattanakul, Chanason Phueng-ngern (Chiang Mai University, Chiang Mai), Sakhorn Rimjaem, Jatuporn Saisut (Chiang Mai University, Chiang Mai; ThEP Center, Bangkok), Pathrapol Lithanatudom (IST, Chiang Mai), Piyarat Nimmanpipug (ThEP Center, Bangkok)

THPOMS028 **Performance Study of the NIMMS Superconducting Compact Synchrotron for Ion Therapy with Strongly Curved Magnets**
Author: Hannah Norman, Robert Appleby (UMAN, Manchester), Mikko Karppinen (CERN, Geneva), Hywel Owen (Cockcroft Institute, Warrington, Cheshire; STFC/DL/ASTeC, Daresbury, Warrington, Cheshire), Elena Benedetto (SEEIIST, Geneva), Suzanne L. Sheehy (The University of Melbourne, Melbourne, Victoria)

THPOMS029 **Testing the Properties of Beam-Dose Monitors for VHEE-FLASH Radiation Therapy**
Author: Joseph John Bateman, Philip Burrows, Luke Aidan Dyks (JAI, Oxford), Roberto Corsini, Wilfrid Farabolini, Alexander Gerbershagen, Natalie Heracleous, Pierre Korysko, Vilde Flognfeldt Rieker, Belen Salvachua, Gabriele Zorloni (CERN, Geneva), Manjit Dosanjh, Sara Morales Vigo, Marco Silari (CERN, Meyrin), Fabrizio Murtas (LNF-INFN, Frascati)

THPOMS030 **Updates, Status and Future Experiments of the CERN Linear Accelerator for Research**
Author: Pierre Korysko (Oxford University, Oxford, Oxon), Wilfrid Farabolini (CEA-DRF-IRFU,), Roberto Corsini, Luke Aidan Dyks, Antonio Gilardi, Vilde Flognfeldt Rieker (CERN, Geneva), Manjit Dosanjh (CERN, Meyrin), Joseph John Bateman, Cameron Stewart Robertson (JAI, Oxford), Kyrre Ness Sjobak (University of Oslo, Oslo)

THPOMS031 **VHEE High Dose Rate Dosimetry Studies in CLEAR**
Author: Vilde Flognfeldt Rieker, Roberto Corsini, Luke Aidan Dyks (CERN, Geneva), Wilfrid Farabolini (CEA-DRF-IRFU,), Joseph John Bateman (JAI, Oxford), Pierre Korysko (Oxford University, Oxford, Oxon)

THPOMS032 **Advances in the Optimization of Medical Accelerators**
Author: Carsten Peter Welsch (Cockcroft Institute, Warrington, Cheshire; The University of Liverpool, Liverpool)

THPOMS033 **Design and Optimisation of a Stationary Chest Tomosynthesis System With Multiple Flat Panel Field Emitter Arrays: Monte Carlo Simulations and Computer Aided Designs**
Author: Thomas Georgios Primidis (The University of Liverpool, Liverpool; Cockcroft Institute, Warrington, Cheshire; King's College London, London), Vadim Soloviev, Stephen Wells (Adaptix Ltd, Oxford), Carsten Peter Welsch (The University of Liverpool, Liverpool; Cockcroft Institute, Warrington, Cheshire)

THPOMS034 **Transformative Accelerator Technologies for FLASH Radiation Therapy**
Author: Carol Johnstone (Fermilab, Batavia, Illinois), Francois Meot (BNL, Upton, New York), Reinhard Wilhelm Schulte (LLU, Loma Linda)

THPOMS035 **First Results from At-211 at Crocker Nuclear Laboratory at UC Davis.**
Author: Eric Prebys, Daniel Cebra, Riley Barr Kibbee, Lena Korkeila, Kathleen Stewart (UCD, Davis, California), Michael R Backfish (UC Davis, Davis)

THPOMS036 **A High Average Current Electron Beamline for Lifetime Testing of Novel Photocathodes**
Author: Matthew Benjamin Andorf, Jai Kwan Bae, Adam Bartnik, Ivan Vasilyevich Bazarov, Samuel Joseph Levenson, Jared Michael Maxson (Cornell University (CLASSE), Ithaca, New York), Luca Cultrera (BNL, Upton, New York)

THPOMS037 **Ripple Pattern Formation on Silicon Carbide Surfaces by Low-Energy Ion-Beam Erosion**
Author: Divya Gupta, Sanjeev Aggarwal (Kurukshetra University, Kurukshetra), Gajigatte Umapathy (IUAC, New Delhi), Rahul Singhal (Malviya Institute of Technology, Jaipur)

THPOMS038 **Spallation Target Optimization for ADS by Monte Carlo Transport Codes**
Author: Mustafa Mumyapan (SKKU, Suwon)

THPOMS039 **Investigation on Intermolecular Interactions in Ionic Liquids Using Accelerator-based THz Transition Radiation**
Author: Panat Nanthanasit (Chiang Mai University, Chiang Mai), Monchai Jitvisate (Suranaree University of Technology, Nakhon Ratchasima), Narupon Chattrapiban, Piyarat Nimmanpipug (ThEP Center, Bangkok), Sakhorn Rimjaem (ThEP Center, Bangkok; Chiang Mai University, Chiang Mai)

THPOMS040 **Present Status of Linear Accelerator System for Natural Rubber Vulcanization at Chiang Mai University**
Author: Chitrlada Thongbai, Sakhorn Rimjaem, Jatuporn Saisut (Chiang Mai University, Chiang Mai; ThEP Center, Bangkok), phanthip Jaikaew, Noppadon Khangrang, Ekkachai Kongmon, Pitch Wongkummoon (Chiang Mai University, Chiang Mai), Michael W. Rhodes (ThEP Center, Bangkok)

THPOMS041 **Design and Parameterization of Electron Beam Irradiation System for Natural Rubber Vulcanization**
Author: Pitch Wongkummoon, Nopadol Kangrang, Sakhorn Rimjaem, Jatuporn Saisut, Chitrlada Thongbai (Chiang Mai University, Chiang Mai), Michael W. Rhodes (IST, Chiang Mai)

THPOMS042 **Development of a Cyclotron Based External Beam Irradiation System for Elemental Analysis**
Author: Piyanud Thongjerm, Akkapob Ngamlamiad, Weerawat Pornroongruengchok, Sarinrat Wonglee (Thailand Institute of Nuclear Technology, Nakhon Nayok)

THPOMS043 **Mu*STAR: Superconducting Accelerator Driven Subcritical Molten Salt Nuclear Power Plants**
Author: Rolland Paul Johnson, Robert Abrams, Mary Anne Clare Cummings, Julio Danin Lobo, Thomas J. Roberts (Muons, Inc, Illinois)

THPOMS044 **Development and Testing of Novel Quadrupole Moment Resonance Spectroscopy for Nuclear Fuel Molten Salts**
Author: Julio Danin Lobo, Robert Abrams, Rolland Paul Johnson (Muons, Inc, Illinois)

THPOMS045 **Development and In-Situ Testing of Novel Electrode and Insulating Materials for Molten Salts**
Author: Supathorn Phongikaroon (VCU, Richmond, Virginia), Rolland Paul Johnson, Julio Danin Lobo (Muons, Inc, Illinois)

THPOMS046 **Generation of Flat-Laser Compton Scattering Gamma-ray Beam in UVSOR**
Author: Hideaki Ohgaki, Khaled Ali, Toshiteru Kii, Heishun Zen (Kyoto University, Kyoto), Takehito Hayakawa, Toshiyuki Shizuma (QST, Tokai), Masaki Fujimoto, Yoshitaka Taira (UVSOR, Okazaki)

THPOMS047 **Design of Radiation Shielding for the PBP-CMU Electron Linac Laboratory**
Author: Phanthip Jaikaew, Noppadon Khangrang (Chiang Mai University, Chiang Mai), Sakhorn Rimjaem (Chiang Mai University, Chiang Mai; ThEP Center, Bangkok), Monchai Jitvisate (Suranaree University of Technology, Nakhon Ratchasima)

THPOMS048 **Challenge Based Innovation "Accelerators for the Environment"**
Author: Nicolas Delerue (Université Paris-Saclay, CNRS/IN2P3, IJCLab, Orsay), Elias Métral, Maurizio Vretenar (CERN, Geneva), Robert Holland, Louis Rinolfi (ESI, Archamps), Philip Burrows (JAI, Oxford)

THPOMS049 **Energy Comparison of Room Temperature and Superconducting Synchrotrons for Hadron Therapy**
Author: Giovanni Bisoffi (INFN/LNL, Legnaro (PD)), Mikko Karppinen (CERN, Geneva), Elena Benedetto, Mohammad Reza Khalvati, Rob van Weelderen, Maurizio Vretenar (CERN, Meyrin), Marco Giuseppe Pullia, Giuseppe Venchi (CNAO Foundation, Pavia), Lucio Rossi (INFN/LASA, Segrate (MI)), Riccardo Umberto Valente (La Sapienza University of Rome, Rome), Mariusz Sapinski (PSI, Villigen PSI), Massimo Sorbi (Universita' degli Studi di Milano & INFN, Segrate)

THPOMS050 **Design of Linac Based Neutron Source**
Author: Nirupama Upadhyay, Sajeev Sakai Chacko (University of Mumbai, Mumbai), Abhay Deshpande, Tanuja Sushant Dixit, Ramamoorthy Krishnan (SAMEER, Mumbai)

THPOMS051 **Study on Construction of an Additional Beamline for a Compact Neutron Source Using a 30 Mev Proton Cyclotron**
Author: Yasutoshi Kuriyama, Masahiro Hino, Yoshihisa Iwashita, Riichiro Nakamura, Hiroki Tanaka (Kyoto University, Osaka)

THPOMS052 **Magnetic Field Schield for SC-cavity with Thin Nb Sheet**
Author: Yoshihisa Iwashita, Yasutoshi Kuriyama (Kyoto University, Osaka), Yasuhiro Fuwa (JAEA/J-PARC, Tokai-mura), Hiromu Tongu (Kyoto ICR, Uji, Kyoto)

THPOMS053 **Proton Beam Irradiation System for Space Part Test**
Author: Hyeok-Jung Kwon, Jeong-Jeung Dang, Won-hyeok Jung, Han-Sung Kim, Kui Young Kim, Kye-Ryung Kim, Seunghyun Lee, Young-Gi Song, Sang-Pil Yun (KOMAC, KAERI, Gyeongju)

THPOMS054 **Beam Lines and Stations for Applied Research Based on Ion Beams Extracted From Nuclotron**
Author: Georgii Filatov, Alexey Agapov, Anton Alexandrovich Baldin, Andrey Butenko, Artem Galimov, Sergey Kolesnikov, Konstantin Nikolaevich Shipulin, Alexey Slivin, Evgeny Syresin, Gennady Nikolaevich Timoshenko, Alexey Tuzikov, Alexey Vorozhtsov (JINR, Dubna, Moscow Region), Igor Glebov, Vladimir Luzanov (GIRO-PROM, Dubna, Moscow Region), Yuriy Titarenko (ITEP, Moscow), Dmitriy Firsov, Alexander Kubankin, Yourii Kubankin (LLC "Vacuum systems and technologies", Belgorod), Dmitry Bobrovskiy, Alexander Chumakov (MEPhI, Moscow), Timur Kulevoy (NRC, Moscow), Pavel Nikolaevich Chernykh, Sergey Osipov, Evgeny Serenkov (Ostec Enterprise Ltd, Moscow), Sylvain Antoine, William Beeckman, Xavier Guy Duveau, Julien Guerra-Phillips, Patrice Jehanno (SIGMAPHI S.A., Vannes)

THPOMS055 **Commissioning of the SOCHI Applied Station Beam and Beam Transfer Line at the NICA Accelerator Complex**
Author: Alexey Slivin, Alexey Agapov, Anton Alexandrovich Baldin, Andrey Butenko, Denis Donets, Georgii Filatov, Artem Galimov, Konstantin Nikolaevich Shipulin, Evgeny Syresin, Alexey Tuzikov (JINR, Dubna, Moscow Region), Alexander Kubankin (BelSU, Belgorod; LPI, Moscow), Igor Glebov, Vladimir Luzanov (GIRO-PROM, Dubna, Moscow Region), Timur Kulevoy, Yuriy Titarenko (ITEP, Moscow), Vladislav Igorevich Tyulkin (JINR, Dubna), Alexander Tikhomirov (JINR/VBLHEP, Dubna, Moscow region), Dmitry Bobrovskiy, Alexander Chumakov, Sergei Soloviev (MEPhI, Moscow)

THPOMS056 **An Overview of the Applications of MIR and THz Spectroscopy in Astrochemistry Studie**
Author: Chutipong Suwannajak, Ukrit Keyen, Apichat Leckngam, Nahathai Tanakul (NARIT, Chiang Mai), Watchara Jaikla, Siriwan Pakluea, Pitch Wongkummoon (Chiang Mai University, Chiang Mai), Sakhorn Rimjaem (Chiang Mai University, Chiang Mai; ThEP Center, Bangkok), Thanapong Phimsen (SLRI, Nakhon Ratchasima), Monchai Jitvisate (Suranaree University of Technology, Nakhon Ratchasima), Piyarat Nimmanpipug (ThEP Center, Bangkok)

THPOMS057 **Using Co-Moving Collisions in a Gear-Changing System to Measure Fusion Cross-Sections**
Author: Edith Anne Nissen (JLab, Newport News, Virginia)

THPOMS058 **High Transport Efficiency and Tunable Beamline for Laser Plasma Acce erator**
Author: Yang Yan, Hao Cheng, Dongyu Li, Yuze Li, Chen Lin, Minjian Wu, Xueqing Yan, Tong Yang, Zhong Xi Yuan, Kun Zhu (PKU, Beijing)

THPOMS060 **Development of Analytical Light Source for Construction of Femtosecond Pulse Radiolysis System Using Er Fiber Laser**
Author: Yutaka Kaneko, Yuya Koshiba, Miu Sato, Masakazu Washio (Waseda University, Tokyo), Kazuyuki Sakaue (The University of Tokyo, Bunkyo; Waseda University, Tokyo)

THPOMS061 **Compact S-Band Accelerating Structure with Power Input for Medical Applications**
Author: Andrew Batov, Kirill Artamonov, Mariya Gusarova, Michael Vladimirovich Lalayan, Sergey Markovich Polozov, Roman Aleksandrovich Zbruev (MEPhI, Moscow), Taras Vladimirovich Bondarenko, Stepan Alexandrovich Polikhov (NIITFA, Moscow)

Fri, June 17, 2022

Jun 17, 2022 09:00 - 09:30 Oral Session Grand Diamond Ballroom

FRIXGD - Invited Orals: Beam Instrumentation, Controls, Feedback and Op. Aspects

FRIXGD1 **Status and Prospects in Fast Beam-Based Feedbacks**
Author: Wolfgang Höfle (CERN, Geneva)

Jun 17, 2022 09:30 - 10:30 Oral Session Grand Diamond Ballroom

FROXGD - Contributed Orals: Beam Instrumentation, Controls, Feedback and Op. Aspects

FROXGD1 **A Method for Obtaining 3D Charge Density Distribution of a Self-Modulated Proton Bunch**
Author: Tatiana Nechaeva, Patric Muggli (MPI-P, München), Giovanni Zevi Della Porta (CERN, Meyrin), Livio Verra (CERN, Meyrin; MPI, Muenchen; TUM, Munich)

FROXGD2 **Development of a Quantum Electron Beam Diagnostic Apparatus**
Author: Shukui Zhang, Alexandre Camsonne, Gunn-Tae Park (JLab, Newport News, Virginia)

FROXGD3 **Injection Beam Measurement Using Synchrotron Radiation Monitor at the SuperKEKB Electron Ring**
Author: Hitomi Ikeda, Toshiyuki Mitsuhashi, Gaku Mitsuka (KEK, Ibaraki)

Jun 17, 2022 09:00 - 09:30 Oral Session Sapphire 204-205

FRIXSP - Invited Orals: Accelerator Technology

FRIXSP1 **Low-Emittance Compact RF Electron Gun With a Gridded Thermionic Cathode**
Author: Takao Asaka (JASRI/SPring-8, Hyogo-ken)

Jun 17, 2022 09:30 - 10:30 Oral Session Sapphire 204-205

FROXSP - Contributed Orals: Accelerator Technology

FROXSP1 **20-Year Collaboration on Synchrotron RF Between CERN and J-PARC**
Author: Chihiro Ohmori (J-PARC, KEK & JAEA, Ibaraki-ken), Salvatore Danzeca (CERN, Geneva), Carlo Rossi (CERN, Geneva 23), Matteo Brucoli, Markus Brugger, Heiko Damerau, Mauro M. Paoluzzi (CERN, Meyrin), Hidefumi Okita, Masashi Shirakata, Fumihiko Tamura (JAEA/J-PARC, Tokai-Mura, Naka-Gun, Ibaraki-Ken), Katsushi Hasegawa, Yuichi Morita, Yasuyuki Sugiyama, Masahito Yoshii (KEK, Tokai, Ibaraki)

FROXSP2 **Demonstration of Gradient Above 300 MV/m in Short Pulse Regime Using an X-Band Single-Cell Structure**
Author: Jiahang Shao, Darrell Scott Doran, Gwanghui Ha, Wanming Liu, John Gorham Power, Charles Whiteford, Eric Edson Wisniewski (ANL, Lemont, Illinois), Chunguang Jing (Euclid Beamlabs, Bolingbrook), Huaibi Chen, Xiancai Lin, Maomao Peng, Jiaru Shi, Hao Zha (TUB, Beijing)

FROXSP3 **First Operation of a Klystron Fitted With a Superconducting MgB2 Solenoid**
Author: Nuria Catalan-Lasheras (CERN, Geneva 23), Igor Syratchev (CERN, Geneva), Marça Boronat, Gerard McMonagle (CERN, Meyrin), Takuji Kimura, Peter Kolda (CPI, Palo Alto, California), Anisullah Baig, Alejandro Castilla (Cockcroft Institute, Lancaster), Shinichiro Michizono, Akira Yamamoto (KEK, Ibaraki)

Jun 17, 2022 11:00 - 12:00 Oral Session Grand Diamond Ballroom

FRPLYGD - Plenary Invited Orals

FRPLYGD1 **Towards Efficient Particle Accelerators - a Review**
Author: Mike Seidel (PSI, Villigen PSI)

FRPLYGD2 **Accelerating the Future: Designing a Robust and Affordable Radiation Therapy Treatment System for Challenging Environments**
Author: Manjit Dosanjh (CERN, Meyrin)

Jun 16, 2022 12:00 - 12:30 Oral Session Grand Diamond Ballroom

FRCPLGD - Closing Plenary

FRCPLGD1 **Synchrotron Light Illuminates the Origin of the Solar System**
Author: Tomoki Nakamura, Megumi Matsumoto (Tohoku University, Sendai), Yuichi Tsuda (ISAS/JAXA, Kanazawa), Sei-ichiro Watanabe (Nagoya University, Nagoya, Aichi), Akira Tsuchiyama (Ritsumeikan University, Kusatsu, Shiga), Shogo Tachibana (The University of Tokyo, Tokyo; ISAS/JAXA, Kanazawa)

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