

Foreword to the ICALEPCS 2021 Proceedings

The 18th International Conference on Accelerator and Large Experimental Physics Control Systems (ICALEPCS 2021) was held from the 14th October to the 22nd October in virtual format due to COVID-19 pandemic. It was hosted by Shanghai Advanced Research Institute. The conference was endorsed by the Chinese Academy of Sciences (CAS), the National Natural Science Foundation of China (NSFC), the European Physical Society (EPS), the American Physical Society (APS), and the Shanghai Nuclear Society. The conference's Local Organizing Committee was advised by two committees made up of members from the three regions – the International Scientific Advisory Committee (ISAC) and the Program Committee (PC). The ISAC was comprised of 38 members and chaired by Kazuro Furukawa from KEK. The PC was made up of 40 members and chaired by Yingbing Yan from SARI.

In total 552 participants registered. Of these, 39 were students. CERN was the most represented institute followed by SARI. The breakdown of attendees by region was as follows: 113 from Asia and Oceania, 371 from Europe, Middle East and Africa, and 68 from North and South America.

A total of 290 abstracts were accepted. Of these, 84 were selected as contributed orals and 206 were poster presentations. For the proceedings, 218 papers were uploaded and processed to be included.

ICALEPCS 2021 put a strong emphasis on having quality and diverse keynote speakers. Zhentang Zhao, from SARI, spoke on Highlights of Accelerator R&D at Shanghai Light Sources Cluster. Lei Ding, from SITP, spoke on Infrared Remote Sensors for Chinese Meteorological Satellites. Juan Yin, from USTC, spoke on Large-scale Quantum Communication Network. Dejun Ning, from SARI, spoke on Digital Transformation of Urban Economy and Case Study. And, Chen Lin, from Peking University, spoke on Laser Ion Accelerator and Its Applications.

The conference themes were chosen by the ISAC. The scientific program was drawn up by the PC. Both committees did an excellent job choosing topics and talks and encouraging experts to present their work. Parallel sessions were necessary, as have been in the past. Out of a total of 27 sessions, 20 were parallel.

There were 5 pre-conference workshops held on the Thursday (14th October) and Friday (15th October) before the conference. The workshop themes were: Linux Distribution and Ecosystem Evolution in Control Systems, TANGO, Data Science and Machine Learning, PLC Based Control Systems, and Motion Control. The attendance of the pre-conference workshops was very high. More than 450 people attended the workshops.

Two awards were given at ICALEPCS 2021, the ICALEPCS Lifetime Achievement Award (LAA) and the ICALEPCS Leadership in Mentoring Award (LMA). The ICALEPCS 2021 LAA award was presented to Andy Götz and Roland Müller. As members of ISAC and IEC, through their organizational skills and vision, as well as technical excellence and tireless activity, they have been the key to the success of two

decades of ICALEPCS conferences. The ICALEPCS 2021 LMA award was presented to Songqiang Liu. With his dedication to training and mentoring over the decades, he successfully grew highly qualified controls engineers, and contributed to the international accelerator community and EPICS collaboration.

The ISAC accepted the bid for ICALEPCS 2025 to be held in Chicago, USA, hosted by Advanced Photon Source (APS)/Argonne National Laboratory (ANL).

As chairs we would like to thank everyone who contributed to make ICALEPCS 2021 a successful and memorable event. The conference was the result of many people's work and support both financial and moral. It all started in 2017 in Barcelona, when the ISAC of ICALEPCS 2017 accepted the SSRF bid to host ICALEPCS 2021 in Shanghai. It continued with ICALEPCS 2019 who sponsored ICALEPCS 2021 with the earnings that remained from ICALEPCS 2019.

We thank all the sponsors and exhibitors who helped finance the conference. They were Beckhoff, Cosylab, D-TACQ Solutions, Instrumentation Technologies, nVent, Plant & Mill Supplies, RadiaSoft LLC, Technosystem and Teledyne SP Devices.

The ISAC chair and committee did a great job advising the LOC during the 2 years leading up to the conference. The PC did an excellent job shaping the scientific program. The editors did an excellent job editing the many abstracts and papers to ensure that the papers were of high quality. The delegates made the conference a success by participating with high quality talks and questions. A big thanks to SARI, the host institute, and all the colleagues who helped and provided support for ICALEPCS 2021.

We want to thank our JACoW team: Zhichu Chen, Volker RW Schaa, Raphael Müller, Akihiro Shirakawa, Lu Li, and the SPMS regional support from Takashi Kosuge.

Finally, we would like to thank all the LOC members who worked very hard to ensure ICALEPCS 2021 was a success!

We look forward to seeing everyone in Cape Town in 2023 and in Chicago in 2025!

Conference Chair: Yongbin Leng
Program Chair: Yingbing Yan