|                              | Monday, 21 August  | Tuesday, 22 August  | Wednesday, 23 August   | Thursday, 24 August  |
|------------------------------|--|---|--|--|
|                              | MO1AB: Welcome and Overview Chair: S. Lidia  | TU1AB: Time Resolved Diagnostics and Synchronization I<br>Chair: A. Fisher  | <b>WE1AB</b> : Overview and Commissioning II<br>Chair: S. Baily  | TH1AB: Beam Loss Monitor and Machine Protection<br>Chair: A. Jansson   |
| 9:00<br>9:10                 | Opening Remarks, S. Lidia (FRIB)   | Precision Large Scale Synchronization System at the European XFEL - C. Sydlo (DESY)   | The SPS Wideband Feedback Processor: A Flexible FPGA-Based Digital Signal Processing Demonstration Platform for Intra-Bunch Beam Stability Studies - J. Dusatko (SLAC)   | Field Emission in Superconducting Accelerators: Instrumented<br>Measurements for Its Understanding and Mitigation - R-L. Geng (Jlab)   |
| 9:20<br>9:30<br>9:40         | Status of the FRIB Project - J. Wei (FRIB)   |   | Diagnostic Challenges at LCLS-II and Lessons Learned from LCLS-I at SLAC - P. Krejcik (SLAC)   | Beam Containment and Machine Protection for LCLS-2 - A. Fisher (SLA  |
| 9:50<br>0:00<br>0:10         | An Overview of Beam Instrumentation Results and Commissioning from the PIP-II Injector Test Accelerator at Fermilab - V. Scarpine (FNAL) | High Repetition-Rate Electro-optic Sampling: Recent Studies Using Photonic Time-Stretch - S. Bielawski (PhLAM/CERCLA)                         | Overview of the Diagnostics of the ELI-NP Gamma Beam System:   | Beam Loss Monitors for Energy Measurements in Diamond Light Source Vitoratou (Royal Holloway University)                               |
| 0:20<br>0:30                 |  | The Optical Dissector Bunch Length Measurements at the Metrology Light Source - D. Malyutin (HZB)   | Challenges for the Electron-Photon Interaction Point Diagnostics - A.  Mostacci (Rome U)   | Status of LEReC Machine Protection System - S. Seletskiy (BNL)   |
|                              |  | Coffee  | Break  |  |
|                              | MO2AB: Overview and Commissioning I Chair: J. Yue  | TU2AB: Time Resolved Diagnostics and Synchronization II Chair: K. Jordan  | <b>WE2AB:</b> Beam Profile Monitor I<br>Chair: W. Blokland   | TH2AB: Charge Monitor and Other Instruments Chair: M. Ferianis   |
| 1:00<br>1:10<br>1:20         | Tutorial   | Tutorial Integrated Photonics to the Rescue of Femtosecond Beam Diagnostics -   | Seminar  Beam Diagnostics Overview and Challenges for Low-Energy, Low-Intensity Beams - C. Welsch (Cockroft Inst.)   | Minimizing Errant Beam at SNS - C. Peters (ORNL)   |
| 1:30<br>1:40<br>1:50         | Beam Measurements Using Schottky Noise Analysis - P. Forck (GSI)   | F. Kaertner (CFEL)  | A Novel Nanotechnology Based Wire Scanner for Sub-Micrometer Resolution Measurements of the Electron Beam Profile at SwissFEL - S. Borrelli (PSI)  A Novel Wire Scanner with Nanofabricated Wires: Design, Fabrication and | Bunch-by-Bunch Bunch Length Measurement Using Two-Frequency Sys<br>at SSRF - Y. Leng (SINAP)   |
| 2:00<br>2:10<br>2:20         | Overview and Status of Diagnostics of ESS Project - T. Shea (ESS)  | Beam Diagnostics for the AWAKE Experiment, M. Martyanov (MPI-P)   | Experimental Results - M. Veronese (Elettra)  Diamond is a Beam's Best Friend - J. Smedley (BNL)   | Optimization of the Cryogenic Current Comparator (CCC) for Beam Inter Measurement - T. Sieber (GSI)  IBIC 16 Summary - U. Iriso (ALBA) |
| 2:30<br>2:40                 | SESAME Storage Ring Diagnostics and Commissioning -  | Single-Shot Longitudinal Beam Profile and Terahertz Diagnostics at MHz  | First Results From the Operation of a Rest Gas Ionisation Profile Monitor<br>Based on a Hybrid Pixel Detector - J. Storey (CERN)   | IBIC 17 Closing - S. Lidia (FRIB)  IBIC 18 Introduction - Y. Leng (SINAP)  |
| 2:50                         | H. Al-Mohammad (SESAME)  | Towards GHz-Rates with High-Throughput Electronics - L. Rota (KIT)  |  | Visit to FRIB  |
| 3:00                         |  | Lunch Break   |  | Box lunch provided for all Conference Attendees  |
|                              | MO3AB: Machine Parameter Measurements Chair: D.Gassner   | TU3AB: BPMs and Beam Stability Chair: N. Eddy   | WE3AB: Beam Profile Monitor II<br>Chair: Y. Leng   | Tour 1 Departs at 13:00 from Amway   |
| 4:00<br>4:10<br>4:20<br>4:30 | ECLIPSE VIEWING  | Optics Measurements at SuperKEKB Using Beam Based Calibration for BPM and Beam Based Experiment - H. Sugimoto (KEK)                           | The LHC Beam Gas Vertex Detector - a Non-Invasive Profile Monitor for High Energy Machines - S. Vlachos (CERN)   | Tour 2 Departs at 14:30 from Amway   |
| 4:40<br>4:50<br>5:00<br>5:10 | Characterizing the Coupled Bunch Driving Terms in a Storage Ring -   | Status of The Transverse Intra Bunch Train Feedback of the European XFEL - B. Keil (PSI)  | Simulation and Progress in Ionization Profile Monitors for High Intensty<br>Proton Beam - K. Satou (KEK)   | Tour 1 departs at 16:00 from FRIB  |
| 5:20<br>5:30                 | K. Harkay (ANL)  | Digital Signal Processing Techniques to Monitor Bunch-by-bunch Beam Positions in the LHC for Machine Protection Purposes - J. Pospisil (CERN) | Commissioning and First Results of the Electron Beam Profiler in the Main Injector at Fermilab - R. Thurman-Keup (Fermilab)  | Tour 2 departs at 17:30 from FRIB  |
| 5:40<br>5:50                 | Review of Beam-Based Techniques of Impedance Measurement - V. Smaluk (BNL)   | Conference Photo  |  | ·  |
| 6:00<br>6:10                 | Beam Diagnostic Challenges for FACET-II - S. Green (SLAC)  |   |  |  |
| 6:20<br>6:30<br>7:00<br>7:30 | Mix & Mingle Poster Session - MOP  | Mix & Mingle Poster Session - TUP   | Mix & Mingle Poster Session WEP  |  |
| 18:00                        |  | Public Lecture  Development of the Electromagnetic MOP, A. Warner (FNAL)  |  |  |

Opening and Closing Sessions

Overview and Commissioning

BPM and Beam Stability

Time Resolved Diagnostics and Synchronization

Beam Loss Detection and Machine Protection

Beam Profile Monitor

Machine Parameter Measurements

Charge Monitor and Other Instruments

Tutorial

Public Lecture



IBIC 17 would like to thank our Exhibitors and Sponsors for their support!

19:00

**Conference Dinner**