

## Invited talks at IBIC 2022

### Overview and Commissioning

Jakub Szlachetko (NSRC) 'Science directions in Poland at the large scale accelerator's based infrastructures'

Steve Lidia (FRIB) 'Beam Diagnostics for FRIB Commissioning'

Robert Nietubyc (NCBJ) 'Overview of Beam Diagnostics for POLFEL'

### Beam Position Monitors

Guenther Rehm (HZB-BESSY) 'Review of BPM Drift Compensation Schemes'

Alberto Arteché (RHUL) 'Electro-Optical BPM Development for High Luminosity LHC'

Adrian Oeftiger (GSI) 'Diagnostics with Quadrupole Pick-ups'

### Transverse Profile and Emittance Monitors

Alexander Koehler (DLR) 'Investigating the Transverse Dynamics of Electron Bunches in Laser-Plasma Accelerators'

Artem I. Novokshonov (DESY) 'First Observation of Quasi-Monochromatic Optical Cherenkov Radiation in a Dispersive Medium (Quartz)'

### Beam Loss Monitors and Machine Protection

Jeffery Dooling (BNL) 'Collimation and Machine Protection for Ultra-Low Emittance Rings (tutorial)'

### Longitudinal Diagnostics and Synchronization

Ryo Kitamura (JAEA/J-PARC) 'First Measurement of Longitudinal Profile of High-Power and Low-Energy H- Beam by using Bunch Shape Monitor with Graphite Target'

Yimei Zhou (SARI-CAS) 'Experimental Verification and Analysis of Beam Loading Effects Based on Precise Bunch-by-Bunch 3D Position Measurement' (remote, pre-recorded talk due to Chinese travel restrictions)

### Beam Charge and Current Monitors

Plamen Boutachkov (GSI) 'Novel Fast Radiation-Hard Scintillation Detectors for Ion Beam Diagnostics'

### Machine Parameter Measurements

Pascal Klag (University Mainz) 'High Accuracy Measurement of the Absolute Energy by Synchrotron Radiation Interferometry with Relativistic Electrons'

Alexandr L. Romanov (Fermilab) 'Experimental Single Electron 6D Tracking in IOTA'

Giada Petringa (INFN/LNS) 'Acceleration, Transport and Diagnostic of Protons from Laser-Matter Interaction'

### Feedback Systems and Beam Stability

Guimei Wang (BNL) 'Beam Stability Requirements for Ultra-Low Emittance Circular Light Sources (tutorial)'

Jonathan Jarvis (Fermilab) 'Experimental Demonstration of Optical Stochastic Cooling: Single-Particle Feedback in the Optical Regime'

Mitsuhiro Masaki (JASRI/Spring8) 'Adaptive Feedforward Control of Closed Orbit Distortion Caused by Fast Helicity-Switching Undulators'

### Talk by Faraday Cup Award Winner

To be announced!