

# MEDSI 2023 Agenda

Beijing, China

06-November -2023 — 10-November -2023

## Tuesday, 7 November 2023

### **TUKAM : Welcome and Keynote Talk 1**

Chair: Yuhui Dong - Chinese Academy of Sciences Institute of High Energy Physics Beijing Synchrotron Radiation Laboratory  
China Hall 1+2  
09:00 - 10:10

09:00 **TUKAM01** Mechanics and Multi-physics Analyses to Serve X-Ray Photon Science  
Speaker: Lin Zhang - SLAC National Accelerator Laboratory LCLS Department

### **TUOAM : Photon Delivery and Process A**

Chair: Yuhui Dong - Chinese Academy of Sciences Institute of High Energy Physics Beijing Synchrotron Radiation Laboratory  
China Hall 1+2  
10:30 - 12:10

10:30 **TUOAM01** Upgrade of European XFEL Beam Shutters for Full Beam Operation  
Speaker: Martin Dommach - European XFEL GmbH

10:50 **TUOAM02** Update of the BM18 ESRF Beamline Development: Presentation of Selected Equipment and Their Commissioning  
Speaker: Pierre Van Vaerenbergh - European Synchrotron Radiation Facility

11:10 **TUOAM03** Progress of Beamlines Design and Key Technologies of Hefei Advanced Light Facility  
Speaker: Xuewei Du - University of Science and Technology of China National Synchrotron Radiation Laboratory

11:30 **TUOAM04** New Developments and Status of XAIRA, the New Microfocus MX Beamline at the ALBA Synchrotron  
Speaker: Nahikari Gonzalez - ALBA-CELLS Synchrotron

11:50 **TUOAM05** Thermal-Deformation Based X-Ray Active Mirror Development: Modulation and Metrology  
Speaker: Fugui Yang - Chinese Academy of Sciences Institute of High Energy Physics Beijing Synchrotron Radiation Laboratory

### **TUOBM : Photon Delivery and Process B**

Chair: Brad Mountford - ANSTO  
China Hall 1+2  
13:30 - 15:50

13:30 **TUOBM01** ForMAX: A Beamline for Multi-Scale and Multi-Modal Structural Characterisation of Hierarchical Materials  
Speaker: Joaquín Benchomo González Fernández - MAX IV Laboratory Lund University

13:50 **TUOBM02** SAPOTI - The New Cryogenic Nanoprobe for the CARNAUBA Beamline at Sirius/LNLS  
Speaker: Renan Ramalho Geraldés - Brazilian Synchrotron Light Laboratory

14:10 **TUOBM03** SAXS Instrumentation at SAXSMAT Beamline for Materials Research at PETRA III  
Speaker: Saskia Pfeffer - Deutsches Elektronen-Synchrotron

14:30 **TUOBM04** Research and Application of Two-Dimensional Energy Spectrum Imaging of Synchrotron Radiation  
Speaker: Zhongliang Li - Shanghai Synchrotron Radiation Facility Shanghai Advanced Research Institute

14:50 **TUOBM05** The Progress in Design, Preparation and Measurement of MLL for HEPS  
Speaker: Shuaipeng Yue - Institute of High Energy Physics Center for Multi-disciplinary Research

15:10 **TUOBM06** MINERVA, a New X-ray Facility for the Characterization of the ATHENA Mirror Modules at the ALBA Synchrotron  
Speaker: Antonio Carballedo - ALBA-CELLS Synchrotron

15:30 **TUOBM07** Newly Developed Wavefront Metrology Technique and Applying in Crystal Processing  
Speaker: Fang Liu - Chinese Academy of Sciences Institute of High Energy Physics

### **Wednesday, 8 November 2023**

#### **WEKAM : Keynote Talk 2**

Chair: Keihan Tavakoli - Synchrotron Soleil  
China Hall 1+2  
09:00 - 10:00

09:00 **WEKAM01** The Progress of HEPS Project  
Speaker: Ping He - Institute of High Energy Physics Accelerator Center

#### **WEOAM: Core Technology Developments**

Chair: Keihan Tavakoli - Synchrotron Soleil  
China Hall 1+2  
10:30 - 12:10

10:30 **WEOAM01** High-Throughput Data Orchestration and Streaming System for High Energy Photon Source  
Speaker: Chenglong Zhang - Institute of High Energy Physics Center for Multi-disciplinary Research

10:50 **WEOAM02** A Vacuum Aspirated Cryo Cooling System (VACCS)  
Speaker: Bodvar Olafsson - Diamond Light Source Ltd

11:10 **WEOAM03** Magnetic Levitation on a Budget  
Speaker: Jonathan Kelly - Diamond Light Source Ltd

11:30 **WEOAM04** Development of Low-Frequency Superconducting Cavities for High Energy Photon Source  
Speaker: Xinying Zhang - Institute of High Energy Physics Chinese Academy of Sciences RF Group of Accelerator Division

11:50 **WEOAM05** Zero-Length Conflat Flange Nonevaporable Getter (NEG) Pump Manufactured by Oxygen-Free Pd/Ti Deposition  
Speaker: Kazuhiko Mase - High Energy Accelerator Research Organization Institute of Materials Structure Science (IMSS) Photon Factory

#### **WEOBM : MC2 & MC3 & MC4 & MC5**

Chair: Martin Dommach - European XFEL GmbH  
China Hall 1+2  
13:30 - 15:50

13:30 **WEOBM01** Challenges and Solutions for the Mechanical Design of SOLEIL-II  
Speaker: Keihan Tavakoli - Synchrotron Soleil

13:50 **WEOBM02** Development of the Bent Focusing Mirror in HEPS from Design to Test  
Speaker: Mw Chen - Institute of High Energy Physics

14:10 **WEOBM03** The Design and Progress of the Network and Computing System for HEPS  
Speaker: Hao Hu - Institute of High Energy Physics Chinese Academy of Sciences Experimental Physics Center

14:30 **WEOBM04** Advancing Simulation Capabilities at European XFEL: A Multidisciplinary Approach  
Speaker: Fan Yang - European XFEL GmbH

14:50 **WEOBM05** Thermal Calculation and Testing of SLS 2.0 Crotch Absorbers

Speaker: Xinyu Wang - Paul Scherrer Institute Mechanical Engineering Sciences

15:10 **WEOBM06** Extension of the IXS High Resolution Monochromator for the RIXS experiment at the Petra III Beamline P01

Speaker: Frank-Uwe Dill - Deutsches Elektronen-Synchrotron

15:30 **WEOBM07** Design, Modeling and Analysis of a Novel Piezoactuated XY Nanopositioner Supporting Beamline Optical Scanning

Speaker: Lingfei Wang - Chinese Academy of Sciences Institute of High Energy Physics Beijing Synchrotron Radiation Laboratory

#### **Thursday, 9 November 2023**

#### **THKAM : Keynote Talk 3**

Chair: Carles Colldelram - ALBA-CELLS Synchrotron

China Hall 1+2

09:00 - 10:00

09:00 **THKAM01** Nanopositioning at Sirius/LNLS Beamlines  $\lambda$  a Review and Future Opportunities

Speaker: Renan Ramalho Geraldes - Brazilian Synchrotron Light Laboratory

#### **THOAM : Precision Mechanics A**

Chair: Carles Colldelram - ALBA-CELLS Synchrotron

China Hall 1+2

10:30 - 12:10

10:30 **THOAM01** Development and Qualification of Micrometric Resolution Motorized Actuators for the High Luminosity Large Hadron Collider Full Remote Alignment System

Speaker: Michel Noir - European Organization for Nuclear Research Beams Department (BE)

10:50 **THOAM02** SmarGon MCS2: An Enhanced Multi-axis Goniometer With a New Control System

Speaker: Wayne Glettig - Paul Scherrer Institute Swiss Light Source

11:10 **THOAM03** Magnetically Levitated 6 DoF Controlled Sample Manipulator for Tomography

Speaker: Theo Ruijl - MI-Partners

11:30 **THOAM04** Overall Progress on Development of X-ray Mirror Mechanical Systems at High Energy Photon Source (HEPS)

Speaker: Zhongrui Ren - Institute of High Energy Physics Center for Multi-disciplinary Research

11:50 **THOAM05** Modeling the Disturbances and the Dynamics of the New Micro CT Station for the Mogno Beamline at Sirius/LNLS

Speaker: Guilherme Sobral de Albuquerque - Brazilian Synchrotron Light Laboratory

#### **THOBM : Precision Mechanics B**

Chair: Lin Zhang - SLAC National Accelerator Laboratory LCLS Department

China Hall 1+2

13:30 - 14:50

13:30 **THOBM01** Structural Dynamic Testing and Design Evaluation of the Formax Detector Gantry

Speaker: Gabor Felcsuti - MAX IV Laboratory Lund University

13:50 **THOBM02** First Results of a New Hydrostatic Leveling System on Test Procedures at Sirius

Speaker: William Heinrich - Setup Automacao e Controle de Processos LTDA Engineering Department

14:10 **THOBM03** Progress and Core Technologies Development of Monochromators for HEPS

Speaker: Hao Liang - Chinese Academy of Sciences Institute of High Energy Physics Beijing Synchrotron Radiation Laboratory

14:30 **THOBM04** Development of a Mirror Chamber System for SHINE Project

Speaker: Fang Liu - ShanghaiTech University School of Physical Science and Technology

**Friday, 10 November 2023**

**FRKAM : Keynote Talk 4**

Chair: Sarah Ann Macdonell - Diamond Light Source Ltd  
China Hall 1+2  
09:00 - 10:00

09:00 **FRKAM01** An Introduction to Accelerator Physics

Speaker: Chuang Zhang - Chinese Academy of Sciences Institute of High Energy Physics

**FROAM : Accelerator**

Chair: Sarah Ann Macdonell - Diamond Light Source Ltd  
China Hall 1+2  
10:30 - 12:10

10:30 **FROAM01** Design and Testing of HEPS Storage Ring Magnet Support System

Speaker: Zihao Wang - Institute of High Energy Physics Accelerator Center

10:50 **FROAM02** Vacuum System of SPS-II: Challenges of Conventional Technology in Thailand New Generation Synchrotron Light Source

Speaker: Thanapong Phimsen - Synchrotron Light Research Institute

11:10 **FROAM03** New Kicker Chambers for the ESRF-EBS Storage Ring

Speaker: Laurent Eybert - European Synchrotron Radiation Facility

11:30 **FROAM04** Stability and Vibration Control for High Energy Photo Source in China

Speaker: Fang Yan - Chinese Academy of Sciences Institute of High Energy Physics Beijing Synchrotron Radiation Laboratory