

XOPT2025 Program

Date April 22(Tue)-April 24(Thu), 2025

Venue Room 313+314

Day1: April 22 (Tue)

JST	Session	Chair	Speaker	Affiliation	Title	
9:40-9:45	Opening					
9:45-10:00	Facility	Takahiro Sato	Aymeric Robert	MAX IV Laboratory	On the benefits of small emittance storage rings	
10:00-10:15			Makina Yabashi	RIKEN SPring-8 Center	An Overview of the SPring-8-II Upgrade Project	
10:15-10:45			(Invited) Jiawei Yan	European XFEL	Generation of high-power attosecond hard X-ray free-electron laser pulses at the European XFEL	
10:45-11:10	Coffee Break					
11:10-11:25	Optics (I)	Kawal Sawhney	Takahiro Sato	SLAC National Accelerator Laboratory	Development of Nano-focus Capability and Applications at the XPP instrument at LCLS	
11:25-11:40			Lei Huang	Brookhaven National Laboratory	Manufacturability-based optical design optimization for advanced Kirkpatrick-Baez X-ray focusing mirrors	
11:40-11:55			Qilushi Huang	Tongji University	Metrology and manufacture of X-ray reflective optics with nanometer accuracy	
11:55-13:25	Lunch Break					
13:25-13:55	Optics (II)	TBD	(Invited) Kawal Sawhney	Diamond Light Source	Optics and Metrology for Diamond-II upgrade	
13:55-14:10			Huang-Wen Fu	NSRRC	The Active Mirror Plane Grating Monochromator	
14:10-14:25			Natalia Gerasimova	European XFEL	High resolution prospects for the soft X-ray experiments at European XFEL	
14:25-14:40			Shutaro Mohri	The University of Tokyo	Development of figure correction system based on thickness of Si for large Wolter mirror	
14:40-14:55			Yusuke Yoshida	Nagoya University	Development of high-resolution space X-ray optics for the solar flare sounding rocket FOXSI-4: current status and future prospects	
14:55-15:30	Photo & Break					
15:30-16:00	ALPS & HEDS & XOPT Joint session Room 303		TBD (ALPS)	TBD	TBD	
16:00-16:30			Nicholas Hartley (HEDS)	SLAC National Accelerator Laboratory	HED Science with XFELs – Results and Future Directions	
16:30-17:00			Makina Yabashi	(Invited) Stefan Vogt (XOPT)	Argonne National Laboratory	The Upgraded APS – Status, Early Results, and Opportunities
17:00-18:30			XOPT Banquet			

Day2: April 23 (Wed)

JST	Session	Chair	Speaker	Affiliation	Title
9:00-9:30	Imaging (I)	Manuel Guizar-Sicairos	(Invited) Xiaojing Huang	Brookhaven National Laboratory	Future Coherent X-ray Imaging Capability at NSLS-II
9:30-9:45			Maik Kahnt	MAX IV	Imaging of smallest signals - hard x-ray dichroic ptychography at the iron K edge
9:45-10:00			Yuhei Sasaki	Tohoku University	Development of Tender X-ray Spectroscopic Ptychography Measurement System Using Advanced Kirkpatrick-Baez Mirrors
10:00-10:15			Tang Li	DESY	High-Resolution Imaging with Multibeam Ptychography: A Pathway to Unlocking Insights into Complex Samples
10:15-10:35	Coffee Break				
10:35-11:05	Imaging (II) / Method	Hiroto Motoyama	(Invited) Kenji Tamasaku	RIKEN SPring-8 Center	Spatial X-ray Modulator
11:05-11:20			Ralf Hendrik Menk	Elettra Sincrotrone Trieste	Advances in X-ray Spectral and Phase Contrast Imaging: A Unified Approach for a Multi-Modal Imaging System
11:20-11:35			Farangis Foroughi	University of Saskatchewan	An Advanced Analysis Method for Multiple Image Radiography(MIR)
11:35-11:50			Artem Saleev	Forschungszentrum Jülich	Towards Near Real-time Computation of Autocorrelation Functions for X-ray Photon Correlation Spectroscopy using FPGAs
11:50-12:05			Vladimir Lipp	European XFEL	Development and validation of modeling software SURFwX to guide high-precision processing of materials of industrial relevance
12:05-13:30	Lunch Break				
13:30-15:00	Poster Session Pacifico Yokohama Exhibition Hall A				
15:00-16:15	OPIC Plenary Room 501+502				

Day3: April 24 (Thu)

JST	Session	Chair	Speaker	Affiliation	Title
9:00-9:30	Imaging (III)	TBD	(Invited) Pablo Villanueva-Perez	Lund University	Novel AI-Driven 3D and 4D Imaging Opportunities at High-Brilliance Sources
9:30-10:00			(Invited) Viktor Nikitin	Argonne National Laboratory	New Developments and Advanced Reconstruction Algorithms in Nano-Holography
10:00-10:15			Yukie Nagai	The University of Tokyo	Comparison of Synchrotron X-ray CT volumes and Lab-based X-ray CT volumes towards Industrial Applications
10:15-10:35	Coffee Break				
10:35-10:50	XFEL	Yuya Kubota	Michele Manfreda	Elettra - Sincrotrone Trieste	Wavefront sensing at FELs: old tricks and new challenges with OAM beams, structured illumination and source metrology
10:50-11:05			Yoko Takeo	The University of Tokyo	Shot-by-shot analysis of spatially varying spectra in soft X-ray free-electron laser
11:05-11:20			Zhi Qiao	ShanghaiTech University	Arrival timing diagnostic tools at Shanghai Soft X-ray Free Electron Laser (SXFEL)
11:20-11:35	Optics (III)		Masafumi Miyake	Osaka University	Development of an etching technique using atmospheric pressure plasma to realize a distortion-free Ge channel-cut crystal monochromator
11:35-11:50			Tianyi Wang	Brookhaven National Laboratory	Key Aspects of Sub-Nanometer Ion Beam Figuring for Synchrotron Hard X-Ray Mirror Fabrication
11:50-13:20	Lunch Break				
13:20-13:50	Optics (IV)	Aymeric Robert	(Invited) Lorenzo Raimondi	Advanced Light Source	Exploring the interaction between X-ray wave and optical elements: a physical optics perspective
13:50-14:05			Xianbo Shi	Argonne National Laboratory	Measurements of source emittance and beam coherence properties of the upgraded APS
14:05-14:20			Felix Wittwer	University of Siegen	Annular refractive x-ray lenses
14:20-14:35			Daiki Ishi	ISAS/JAXA	Bragg reflection X-ray polarimeter based on a bent silicon crystal using hot plastic deformation
14:35-15:00	Coffee Break				
15:00-15:15	Imaging (IV)	Takashi Kimura	Mikhail Lyubomirskiy	Lund University	Tilting X-ray Ptychography
15:15-15:30			Roberta Totani	Elettra Sincrotrone Trieste	The new Coherent Diffraction Imaging beamline at Elettra 2.0
15:30-15:45			Emil Jan Skrentny	Forschungszentrum Jülich GmbH	Operando X-ray Absorption Microscopy to Measure Concentration Profiles in Battery Electrolytes
15:45-16:00	Closing				