XOPT2024 Program

Date 23rd (Tue) - 25th (Thu), April, 2024
Venue Room 313+314

Date: 23rd April, 2024

JST	Session	Chair	Speaker	Affliation	Title
9:15	Opening		**Tetsuya Ishikawa**	RIKEN SPring-8 Center	XOPT Opening Remarks
9:20 - 9:50	XFEL1	Aymeric Robert (MAX IV Laboratory)	**Jingyi Tang**	SLAC National Accelerator Laboratory	Active Q-switched X-Ray Regenerative Amplifier Free-Electron Laser
9:50 - 10:20			**Kelin Tasca**	European XFEL	Overcoming challenges in the hard X-ray regime under high-heat load at EuXFEL: a diamond channel-cut monochromator as an alternative.
10:20 - 10:45	Break (10:20 - 10:45)				
10:45 - 11:15	Facility1	Harald Sinn (European XFEL)	**Taito Osaka**	RIKEN SPring-8 Center	Novel X-ray optics for SPring-8-II
11:15 - 11:45			**Jin Wang**	Advanced Photon Source	Manipulating Synchrotron X-ray Pulses with Picosecond Resolution
11:45 - 12:00			Gung-Chian Yin	National Synchrotron Radiation Research Center	The current status of X-ray Micro and Nano-Tomography endsation at Taiwan Photon Source
12:00 - 13:25	Lunch (12:00 - 13:25)				
13:25 - 13:55	Facility2 + Metrology	Diling Zhu (SLAC)	**Yong Chu**	National Synchrotron Light source II	Current and Near-Future Nanoscale X-ray Imaging Capabilities at NSLS-II
13:55 - 14:10			Ying Chen	SLAC National Accelerator Laboratory	A Beam-multiplexing Double Crystal Monochromator for LCLS-II-HE
14:10 - 14:25			Zhi Qiao	ShanghaiTech University	Deep learning based X-ray Wavefront Sensing methods for Synchrotron and Free Electron Laser
14:25 - 14:40			Mikako Makita	European XFEL GmbH	Pulse profiles and impressions of Hard X-ray Free Electron Lasers
14:40 - 14:55			Michele Manfredda	Elettra – Sincrotrone Trieste	Wavefront sensing and Optical Simulations: the Swiss-army knife of FERMI Photon Transport. Advances and current trends.
14:55 - 15:30	**Photo & Break (14:55 - 15:30)**				
15:30 - 15:45	Optics + Company	Yong Chu (NSLS II)	Ikuyuki Mitsuishi	Nagoya University	Future prospects of high-resolution space X-ray optics with ground-based technologies
15:45 - 16:00			Kazuki Ampuku	Nagoya University	Development of X-ray optics for the solar flare sounding rocket FOXSI-4: ground calibration
16:00 - 16:15			Jörn Volkher Wochnowski	Technische Hochschule Lübeck	Highly Flexible Coated Hollow Capillaries for Synchrotron Radiation
16:15 - 16:30			Roberta Totani	Elettra Sincrotrone Trieste	Synchrotron- and substrate-induced modifications on beamline optical elements
16:30 - 16:45			Adam Kubec	XRnanotech GmbH	Unlocking New Horizons in Xray Optics with High Aspect Ratio Structures
16:45 - 17:00			Tomomi Ogaki	Canon Marketing Japan, Inc.	High Efficiency X-ray Optics for Laboratory Instrumentation and Applications
18:30	**XOPT Banquet @ Jin**				

Date: 24th April, 2024

JST	Session	Chair	Speaker	Affliation	Title
9:00 - 9:30	Mirror	Satoru Egawa (The University of Tokyo)	**Josep Nicolas**	ALBA SYNCHROTRON LIGHT SOURCE	Removal of systematic errors in metrology for ultra-accurate x-ray mirrors
9:30 - 9:45			Qiushi Huang	Tongji University	Development of stitching interferometry and ion beam figuring methods for high precision X-ray mirrors
9:45 - 10:00			Takenori Shimamura	The University of Tokyo	Ultracompact Kirkpatrick-Baez mirror for forming 20-nm achromatic soft-X-ray nanoprobes
10:00 - 10:15			Lorenzo Raimondi	Elettra-Sincrotrone Trieste	Analytical and Simulation investigation of scattering effects induced by surface defects on X-ray mirrors
10:15 - 10:30	Break (10:15 - 10:30)				
10:30 - 12:00	**Poster session (Pacifico Yokohama Exhibition Hall A)**				
12:00 - 14:15	Lunch (12:00 ~ 14:15)				
14:15 - 14:45	Joint Session (ALPS, HEDS, XOPT)	ALPS	**Ye Tian**	Chinese Academy of Sciences	Ultrafast laser driven Coherent Terahertz Surface plasmon polariton amplification and electron acceleration
14:45 - 15:15		Makina Yabashi (RIKEN)	**Manuel Guizar-Sicairos**	Paul Scherrer Institut	Computational X-ray imaging for nanoscale characterization of materials
15:15 - 15:45		Youichi Sakawa (Osaka Univ.)	**Hye-Sook Park**	Lawrence Livermore National Laboratory	Study of astrophysical collisionless shocks in the laboratory
15:45 - 16:15	Break (15:45 ~ 16:15)				
16:15 - 18:45	**OPIC Plenary@Room 301**				
19:00 -	**OPIC Banquet**				

Date: 25th April, 2024

JST	Session	Chair	Speaker	Affliation	Title
9:00 - 9:30	Imaging1	Takashi Kimura (The University of Tokyo)	**Yukio Takahashi**	Tohoku University	X-ray Spectroscopic Ptychography: Current Status and Future Perspectives
9:30 - 10:00			**Maik Kahnt**	MAX IV Laboratory	Ptychography at MAX IV - studying samples, beams and optics
10:00 - 10:30			**Zirui Gao**	National Synchrotron Light Source II	High-throughput nanoscale ptychographic tomography achieved with rapid scanning microscopy instrument at HXN beamline
10:30 - 10:55	Break (10:30 - 10:55)				
10:55 - 11:10	Imaging2	Jumpei Yamada (Osaka Univ.)	Mikhail Lyubomirskiy	Deutsches Elektronen-Synchrotron	Multibeam ptychography: nanoimaging at macro scale
11:10 - 11:25			Tang Li	Deutsches Elektronen-Synchrotron	Real-life challenges of single-beam ptychography vs. multi-beam ptychography
11:25 - 11:40			Kyota Yoshinaga	The University of Tokyo	Development of Single-Frame Spectro-microscopy Using Non-monochromatized Soft X-ray Beam
11:40 - 11:55			Gota Yamaguchi	RIKEN SPring-8 Center	Single-shot high-resolution in-line holography with XFEL
11:55 - 13:30	Lunch (11:55 - 13:30)				
13:30 - 14:00	XFEL2	Hiroto Motoyama (The University of Tokyo)	**Patrik Vagovic**	Deutsches Elektronen-Synchrotron	MHz X-ray Multi-Projection Imaging
14:00 - 14:15			Natalia Gerasimova	European XFEL	The Soft X-ray Monochromator at the SASE3 beamline of the European XFEL
14:15 - 14:55	Break (14:15 ~ 14:55)				
14:55 - 15:10	Applications	Mikako Makita (European XFEL GmbH)	Bi-Hsuan Lin	National Synchrotron Radiation Research Center	Capabilities of Time-resolved X-ray excited optical luminescence of TPS 23A X-ray nanoprobe via hybrid bunch mode
15:10 - 15:25			Tzu-Chi Huang	National United University	Exploring Quantum Properties of GGG Wafer Using TPS 23A Hard X-ray Nanoprobe:Integration of HB-T Interferometer and Insights into Single Photon Sources
15:25 - 15:40			Bryan Pi Ern Tee	Commonwealth Scientific and Industrial Research Organisation	First principle lineshape fitting of Compton X-rays for XRF spectroscopy
15:40 - 15:55			Yu-Hsuan Chien	National Yang Ming Chiao Tung University	Using Shifting Based Automatic X-ray Inspection System to Estimate the Wire Thickness by Digital Tomosynthesis
15:55	Closing		**Kazuto Yamauchi**	Osaka University	XOPT Closing Remarks
16:00	Deperture				

Posters

Poster session	Speaker	Affliation	Title
1	Wei-Lon Wei	National Synchrotron Radiation Research Center	Europium Doped Zinc Oxide Thin Films Grown by Pulsed-Laser Deposition
2	Ren Nasukawa	Tohoku University	Fabrication of X-ray absorption gratings with 9 μm period by centrifugal deposition
3	Shutaro Mohri	The University of Tokyo	Development of high-precision electroformed Wolter mirror for X-ray telescope
4	Ruairí Brady	University College Dublin	Development and Optimisation of a Table-Top Soft X-Ray Light Source using Novel Techniques
5	Akio Yoneyama	SAGA Light Source	Scanning X-ray Fluorescence Microscopy using white SR at SAGA Light Source
6	Ryo Barnabas Tanaka	Osaka Metropolitan University	Quantum correlation between spin of photoelectrons and polarization of emitted X-ray photons in 3d transition metal oxides
7	Maurizio Vannoni	European XFEL	New and old challenges for X-Ray Optics critical components at European XFEL
8	Ryuto Fujii	Nagoya University	Development of High-resolution Space X-ray Optics for the Solar Flare Sounding Rocket FOXSI-4: Vibration Test
9	Yusuke Yoshida	Nagoya University	Development of High-resolution Space X-ray Optics for the Solar Flare Sounding Rocket FOXSI-4: Ray-tracing Simulation
10	Junya Yoshimizu	Nagoya University	Development of monolithic bimorph mirror based on single crystal piezoelectric element for variable beam size optical system
11	Satsuki Ito	Nagoya University	Development of high-resolution X-ray microscope with multilayer AKB mirror for 17.5 keV X-ray
12	Hiroto Motoyama	The University of Tokyo	High-speed X-ray Imaging of Electrical Discharge Machining (EDM)
14	Satoru Egawa	The University of Tokyo	4D-CT imaging of lathe drilling of steel workpieces using synchrotron X-rays at 100 keV
15	Kota Shioi	Osaka University	Development of X-ray wavefront-corrected multilayer mirrors for high-resolution holography imaging
16	Yu Nakata	The University of Tokyo	Towards Stimulated X-Ray Raman Scattering Imaging System Using X-Ray Free-Electron Laser
17	Masafumi Miyake	Osaka University	High-pressure plasma etching for a finish processing of a micro channel-cut crystal monochromator
18	Atsushi Yakushigawa	Osaka University	XAFS-imaging & phase-contrast imaging via a full-field X-ray microscope based on Advanced Kirkpatrick–Baez mirror
19	Atsuya Nagamatsu	Osaka University	Development of scanning-imaging X-ray microscope using advanced Kirkpatrick–Baez mirror
20	Bo-Yi Chen	National Synchrotron Radiation Research Center	The Construction of TPS 31A2 Transmission X-ray Microscopy (TXM) Endstation