

XOPT2023 Program

Date 18th (Tue) - 20th (Thu), April, 2023
 Venue Room 313+314

Date: 18th April, 2023

JST	Session	Chair	Speaker	Affiliation	Title
10:00	Opening		Tetsuya Ishikawa	RIKEN SPring-8 Center	XOPT Opening Remarks
10:05 - 10:35	Beamlines I & Metrology I	Harald Sinn (European XFEL)	Xianbo Shi	Argonne National Laboratory	Progress on R&D of X-ray wavefront sensors and adaptive optics optimization and control at the Advanced Photon Source
10:35 - 11:05			Mourad Idir	Brookhaven National Laboratory	Optical metrology for synchrotron mirrors at NSLS-II
11:05 - 11:35			Marco Zangrando	Elettra & CNR IOM	Recent results and developments of the FERMI photon beam transport and diagnostics system
11:35 - 13:15	Lunch (11:35 - 13:15)				
13:15 - 13:45	Beamlines II	Ichiro Inoue (RIKEN)	Bernd Christian Meyer	Brazilian Synchrotron Light Laboratory	Opto-mechanical design and commissioning of the high energy Zoom-tomography beamline MOGNO
13:45 - 14:15			Takahisa Koyama	JASRI & RIKEN	Multilayer reflective optics for intense X-rays at SPring-8 and SACLA
14:15 - 14:30	Break (14:15 - 14:30)				
14:30 - 15:00	Methods & Applications I	Takashi Kimura (Univ. of Tokyo)	Andrey Shavorskiy	MAX IV Laboratory	Ambient Pressure XPS at MAX IV: challenges and opportunities of the high brightness of the 4th generation storage ring
15:00 - 15:15			Takahiro Sato	SLAC National Accelerator Laboratory & RIKEN	Time-resolved full-field rocking curve imaging of X-ray optics for visualization of impulsive thermal effects
15:15 - 15:30			Hideyo Kuniieda	Aichi Synchrotron Radiation Center	Design of Multilayer Optics for Fluorescence X-ray Imaging
15:30 - 16:20	Photo & Break (15:30 - 16:20)				
16:20 - 18:00	OPIC Plenary@Room 301				
18:30 -	Banquet				

Date: 19th April, 2023

JST	Session	Chair	Speaker	Affiliation	Title
9:00 - 9:30	Beamlines III & Metrology II	Takahiro Sato (SLAC)	Luc Paththey	Paul Scherrer Institute	SwissFEL soft X-ray beamline design and first results
9:30 - 9:45			Analia Fernández Herrero	Helmholtz-Zentrum Berlin	Ex-situ and at-wavelength metrology for the production of novel optical elements
9:45 - 10:00	X-ray Telescopes		Kaiyu Tsuchiya	Tokyo Denki University	Prototyping of Pleaser CFRP-NIP Mirrors for High Angular Resolution X-ray Telescopes
10:00 - 10:15			Ryuto Fuji	Nagoya University	Development of high-angular resolution space X-ray telescope for the solar sounding rocket mission FOXSI-4
10:15 - 10:30			Break (10:15 - 10:30)		
10:30 - 11:00	Joint Session (ALPS, HEDS, XOPT)	Fumihiko Kannari (Keio Univ.)	Michal Košelja	ELI Beamlines	Development of large size single crystals for High Power Lasers
11:00 - 11:30		Makina Yabashi (RIKEN)	Kazuto Yamauchi	Osaka University	Generation of extremely intense photon field by condensation of X-ray free electron laser SACLA less than 10nm
11:30 - 12:00		Yasuhiko Sentoku (Osaka Univ.)	Annie Kritcher	Lawrence Livermore National Laboratory	Design of first fusion experiment to achieve target gain >1
12:00 - 13:30	Lunch (12:00 - 13:30)				
13:30 - 15:00	Poster session (Pacifico Yokohama Exhibition Hall A)				
15:00 - 15:15	Break (15:00 - 15:15)				
15:15 - 15:30	Applications II	Satoru Egawa (Univ. of Tokyo)	Clemens Schulze-Briese	DECTRIS Ltd.	EIGER2 CdTe Detectors for Hard X-ray Research
15:30 - 15:45			Florian Döring	XRFanotech GmbH	Diffraction X-ray Optics - New Trends and Developments
15:45 - 16:00			Sergey Antipov	PALM Scientific	Commercial Diamond X-Ray Lenses: A Comprehensive Review of a Parameter Space
16:00 - 16:20			Break (16:00 - 16:20)		
16:20 - 18:50	OPIC Plenary@Room 301				
19:00 -	OPIC Banquet				

Date: 20th April, 2023

JST	Session	Chair	Speaker	Affiliation	Title
9:00 - 9:15	X-ray Optics I	Hidekazu Mimura (Univ. of Tokyo)	Talgat Mamyrbayev	Paul Scherrer Institut	Diffraction optics for X-ray free-electron laser applications
9:15 - 9:30			Junpei Yamada	Osaka University & RIKEN	Design, fabrication, and implementation of XFEL sub-10 nm focusing mirrors
9:30 - 9:45			Leroy Dean Chapman	University of Saskatchewan	A deeper understanding of bent Laue crystal X-Ray optics - monochromatic focusing
9:45 - 10:00			Michele Manfreda	Elettra - Sincrotrone Trieste - S.C.p.A	Wavefront sensing - Investigating FEL sources and Optics tuning
10:00 - 10:15			Patricia Estrela	GoLP/IPPN, Instituto Superior Técnico- Lisboa	High Harmonic Tubes: Generating EUV vortex beams with extended focal field
10:15 - 10:30			Break (10:15 - 10:30)		
10:30 - 11:00	X-ray Imaging I	Jangwoo Kim (PAL)	Jasper Frohn	Institute for X-ray Physics - Göttingen University	X-ray optics and 3D multi-scale bioimaging at P10/PETRA III
11:00 - 11:15			Gota Yamaguchi	RIKEN SPring-8 Center	Hard X-ray in-line holography using high-NA (0.01) focusing system
11:15 - 11:30			Kai Sakurai	The University of Tokyo	Soft X-ray XAFS ptychography for chemical state analysis of mammalian cells
11:30 - 11:45			KyeoReh Lee	Korea Advanced Institute of Science and Technology	Full-field quantitative X-ray phase nanotomography using space-domain Kramers-Kronig relations
11:45 - 12:00	Haruki Nishino	JASRI & RIKEN	CITUIS: a 17400 frames/s X-ray imaging detector with a linear response of up to 945 Mcps/pixel		
12:00 - 13:30	Lunch (12:00 - 13:30)				
13:30 - 14:00	X-ray Imaging II & Beamlines IV	Ayméric Robert (MAX IV)	Dina Carbone	MAX IV Laboratory	A 3D microscopy for crystalline materials at 4th generation Synchrotron sources
14:00 - 14:15			Mikhail Lyubomirsky	CXNS, DESY	Coded multi-probe X-ray Ptychography
14:15 - 14:30			Juan Reyes-Herrera	European Synchrotron (ESRF)	Modelling techniques for insertion device power management, photon transport and coherence propagation for ESRF beamlines
14:30 - 14:45	Break (14:30 - 14:45)				
14:45 - 15:00	X-ray Optics II	Satechi Matsuyama (Nagoya Univ.)	Nazanin Samadi	Paul Scherrer Institute	Design, fabrication, and testing of refractive axicons for X-ray microscopy application
15:00 - 15:15			Rafael Celestre	ESRF - The European Synchrotron	Tilted x-ray lenses and the fine-tuning of their focal length
15:15 - 15:30			Igor Makhokin	University of Twente	Development of Si, SiC and polymer nano-focusing lenses at the University of Twente
15:30 - 15:45			Ken Vidar Falch	Deutsches Elektronen-Synchrotron	Variational Compound Refractive Lenses
15:45 - 16:00			Peng Qi	Paul Scherrer Institut	Recent developments of achromatic and apochromatic X-ray lenses
16:00 - 16:15			Lorenzo Raimondi	Elettra-Sincrotrone Trieste	Scattering effect from mirror surface defects: analytical and simulation approach
16:15	Closing		Kazuto Yamauchi	Osaka University	XOPT Closing Remarks
16:30	Departure				

Posters

Poster session	Speaker	Affiliation	Title
1	Akio Yoneyama	SAGA Light Source	Development of Cryo-Micro X-ray CT and its Applications at SAGA Light Source
2			
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4			
5	Jangwoo Kim	Pohang Accelerator Laboratory	Surface Figure Correction using Differential Deposition Method for High-Precision X-ray Mirror Fabrication
6	Bo-Yi Chen	National Synchrotron Radiation Research Center	The Development of the TXM Endstation for TPS 31A
7	Kang Ching Chu	National Synchrotron Radiation Research Center	The Applicability of a Convolutional Neural Networks Denoising Approach for X-ray Coherent Diffraction Imaging
8			
9	Giang Tran	RIKEN	Computational lensless imaging using broadband attosecond pulses
10	Yi-Wei Tsai	National Synchrotron Radiation Research Center	Hard X-ray Ptychography using Zone Plate in Taiwan Photon Source
11			
12			
13	Tetsuya Hoshino	University of Tsukuba	Rigorous 3D analysis of isolated resist pattern using soft X-ray spectrum
14	Chika Kamezawa	Photon Factory, Institute of Materials Structure Science/ KEK	Feasibility study of 3D X-ray elastography using laboratory X-ray source
15	Kota Kumagai	Utsunomiya University	X-ray and visible imaging system based on spatially selective generation of femtosecond-laser-driven light source
16	Yanwen Sun	SLAC National Accelerator Laboratory	Design and performance analysis of a quasi-linear instrument for hard x-ray photon correlation spectroscopy
17	Sota Nakabayashi	Nagoya University	Development of ultraprecise X-ray adaptive optical system for high-resolution full-field microscopy
18	Shimosuke Kurimoto	Nagoya University	X-ray Fourier ptychography using advanced Kirkpatrick-Baez mirrors
19	Kyota Yoshinaga	ISSP, The University of Tokyo	Design of Wolter Mirror and Multi-Aperture Grating for Single-Frame Spectromicroscopy with Multicolor Soft X-ray Beam
20	Shotaro Matsumura	Osaka University	Surface finishing of a micro channel-cut crystal monochromator using high-pressure plasma etching
21	Nazanin Samadi	Paul Scherrer Institute	Blazed X-Ray Diffraction Gratings Fabricated by Grey-Tone Electron-Beam Lithography and Thermal Oxidation of Silicon
22	Atsuki Ito	Osaka University	direct focus characterization of sub-10 nm XFEL using speckle patterns from random nanoparticles
23	Iori Ogasahara	Osaka University	Development of distortion-free processing for narrow-gap channel-cut crystal monochromators using plasma chemical vaporization machining with a wire electrode
24	Kota Shioi	Osaka University	Beam diameter characterization of sub-10 nm XFEL using ptychography
25			
26	Atsushi Yakushigawa	Osaka University	Development of phase-contrast imaging method for X-ray nanotomography with full-field X-ray microscope based on AKB mirror
27	Andrey Sokolov	BESSY-II	At-Wavelength Metrology for sophisticated diffractive optics in the EUV, XUV and tender X-ray energy range
28	Kouhei Okitsu	The University of Tokyo	Computer-simulated and experimentally obtained n-beam Pinhole topographs