

# XOPT2019 Simple oral program

Room 313+314

23rd, Tue	Session	Chair	Speaker	Presentation title		
8:00	Registration starts					
9:00	Plenary session ※Room 501+502					
9:30						
10:00						
10:30						
11:00						
11:30						
12:00	Lunch					
12:30						
13:00						
13:30	Joint session (ALPS, HEDS, XOPT) ※Room 303	Hitoki Yoneda	Csaba Tóth	Recent advances on the BELLA PW laser for collaborative research in laser plasma science		
13:45			Akifumi Yogo	Ryosuke Kodama	Status and Prospect of high energy density science with high power lasers at Osaka University	
14:00				Francesco Sette		
14:15						
14:30						
14:45	Makina Yabashi		Status of the EBS Programme Implementation at the ESRF			
15:00	Break					
15:25	Opening		Tetsuya Ishikawa	XOPT Opening Remarks		
15:30	XPCS/XSVS	Aymeric Robert	Alec Sandy	XPCS Extended to Microsecond Timescales: Current Progress and Future Prospects		
15:45			Foivos Perakis	Ultrafast XPCS of Supercooled Water and Aqueous Solutions		
16:00			Yanwen Sun	Contrast optimization for two-pulse X-ray Speckle Visibility Spectroscopy experiment		
16:15						
16:30	Break					
16:45						
17:05	Optics I (ML/diffractive)	Hirokatsu Yumoto	Yong S. Chu	MLL-Based X-Ray Microscopy Capability at the National Synchrotron Light Source II		
17:20			Christian Morawe	X-ray mirror figure correction by differential deposition		
17:35						
17:50	Photo/Break/Move					
19:00~ 21:00?	XOPT Banquet					

24th, Wed	Session	Chair	Speaker	Presentation title
8:00	Registration starts			
9:00	XFEL facilities	Paul Fuoss	Ichiro Inoue	Recent status and future perspectives of SACLA
9:15			Anders Madsen	Materials Imaging and Dynamics Station at the European X-Ray Free-Electron Laser Facility
9:30				
9:45				
10:00	Break			
10:15				
10:30	XFEL diagnostics	Diling Zhu	Takahiro Sato	Characterization of single shot spectrum of LCLS by using high resolution single shot spectrometer and machine learning
10:45			Michele Manfreda	Investigating FEL sources: a joint approach of Wavefront sensing, Metrology characterization, and WISER simulations
11:00			Ilija Petrov	Diffraction in strongly bent crystals: applicability of the kinematical theory
11:15	Nonlinear optics	Kenji Tamasaku		X-ray nonlinear spectroscopy with two-photon absorption
11:30			Sason Sofer	Quantum illumination with x-rays
11:45				
12:00	Lunch			
12:30				
13:00				
13:30	Optics II (reflective)	Satoshi Matsuyama	Deming Shu	Preliminary Mechanical Test of a Capacitive Sensor Array for 300-mm Long Elliptically Bent Hard X-ray Mirror with Laminar Flexure Bending Mechanism
13:45			Taro Sakao	Advances in the Development of Precision Wolter Mirrors for Future X-ray Observations of the Sun
14:00	Methods I	Paul Fuoss		A Quasi-Linear Instrument for Coherent X-Ray Diffuse Scattering Studies
14:15			Taito Osaka	Upgrade of Hard X-Ray Split-and-Delay Optical System at SACLA
14:30			Diling Zhu	A compact hard x-ray split-delay system with fly-scan capability based on variable-gap channelcuts
14:45				
15:00	Break			
15:15				
15:30	Imaging I	Wataru Yashiro	Yujiro Hayashi	Scanning three-dimensional x-ray diffraction microscopy with a high-energy microbeam
15:45			Peng Qi	High Energy Resolution Bent Laue Dispersive Monochromator with Application to Selenium Speciation CT
16:00			Irina Snigireva	X-ray Reflecto-interferometry Based on Refractive Optics for Thin Films Characterization
16:15			Petr Ershov	X-Ray Microscopy for High Pressure Research
16:30			Gung-Chian Yin	The Projection and Transmission X-ray Microscopy Project at Taiwan Photon Source
16:45			Frank Hertlein	Double Multilayer Monochromators DMM and Montel X-ray Optics for Synchrotron Beamlines
17:00	Company session	Emil Espes		X-ray Source Technology for High Throughput in the Home-Laboratory and Tomography Applications
17:10				
17:20	Break/Move			
18:00~ 20:00	OPIC Reception			

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25th, Thr	Session	Chair	Speaker	Presentation title
8:00	Registration starts			
9:00	Optics III (high-heat-load/ high-brilliance)	Hidekazu Mimura	Tommaso Mazza	X-ray FEL beam transport and focusing at high repetition rates at the European XFEL
9:15			Daniel Cocco	Diffraction limited optics – theory and tests of what you need to do to preserve the quality of the source
9:30			Yuri Shvyd'ko	Diamond Channel-Cut Crystals
9:45	Imaging II		Ralf Hendric Menk	Assessment of Image Contrast and Signal to Noise Ratio in Analyzer Based Imaging
10:00			Ryosuke Ueda	Low-dose Phase CT Reconstruction using Convolutional Neural Network without Training Data Preparation
10:15				
10:30	Poster session			
11:00				
11:30				
12:00	Lunch			
12:30				
13:00				
13:30	Imaging III	Christian Morawe	Satoshi Matsuyama	High-Resolution Full-Field X-Ray Microscope Based on Multilayer Advanced Kirkpatrick-Baez Mirror Optics
13:45			Satoru Egawa	Femtosecond soft x-ray imaging based on grazing incidence objective mirrors
14:00			Zirui Gao	3D nanoscale chemical state speciation with X-ray ptychographic spectroscopy
14:15			Huaidong Jiang	High-resolution coherent diffraction imaging with synchrotron radiation and XFELs
14:30			Rakchanok Rungsawang	Hartmann wavefront sensors and adaptive optics for EUV and X-rays
14:45				
15:00	Break			
15:15				
15:30	Optics IV (refractive)	Takahiro Sato	Anatoly Snigirev	Status of refractive optics development for diffraction-limited X-ray sources
15:45			Mikhail Lyubomirskiy	Planar refractive nanofocusing lenses made of SiC for Free Electron Laser sources
16:00	Methods II		Takato Inoue	Precision KB mirror alignment using new nanobeam diagnosis
16:15			Ruslan Kurta	Fluctuation x-ray scattering with next-generation x-ray sources
16:30				
16:45	Closing		Kazuto Yamauchi	Closing Remarks

## XOPT2019 Simple poster program

#	Presenter	Presentation title
1	Wataru Yashiro	Fabrication of X-ray absorption grating using ultracentrifuge
2	Shangwei Lin	In situ Long Trace Profiler Measurement For Bendable Gratings in the High Energy Resolution Soft X-ray Beamlines
3	Michal Odstrcil	Optimization of Fresnel zone plate optics for high resolution X-ray ptychography
4	Yajun Tong	A direct measurement method of inner diameter for mono capillary
5	Yajun Tong	Heat load Analysis of the first mirror at SHINE
6	Biao Deng	Single bounce ellipsoidal monochromator for full-field TXM and Micro-XRF
7	Bo-Yi Chen	The Stability Improvements of Montel Mirror Holder for X-ray Nanoprobe
8	Dongni Zhang	The study of the stitching interferometry
9	Jumpei Yamada	Development of XFEL sub-10 nm focusing system based on Wolter III-advanced KB optics
10	Hiroyuki Yamaguchi	Development of adaptive X-ray focusing system consisting of concave mirror and convex mirror
11	Yusuke Matsuzawa	A surface figuring method for fabricating ultraprecise soft x-ray ellipsoidal mirror
12	Takenori Shimamura	Development of Small Kirkpatrick-Baez Mirror System for Nano-Focusing of X-Rays
13	Yoko Takeo	Soft X-ray focusing system using ellipsoidal mirror for ptychographic imaging
14	Gota Yamaguchi	Replication Accuracy of Cu Electroforming Process for Non-magnetic Soft X-ray Mirrors
15	Satsuki Shimizu	Determination of approximate functions for shape measurement of soft x-ray focusing ellipsoidal mirrors
16	Ming Li	R&D of Elliptically Bent Mirrors in HEPS
17	Joern Seltmann	FEM-simulations for a high-heat-load mirror
18	Fugui Yang	Requirement on the mirror quality considering the partial coherence of the source
19	Sergey V. Rashchenko	Modern X-ray Optics Solutions for 4th Generation SKIF Light Source
20	Jana Raabe	Novel UHV lens changer at the PETRA III Beamlines P22, P23 and P24
21	Weiwei Zhang	Influence of the bridges on prism-array lens focusing for high energy X-rays
22	Mikhail Lyubomirskiy	Ptychographic characterisation of polymer compound refractive lenses manufactured by additive technology
23	Dmitrii Zverev	X-ray beam-shaping refractive optics and its applications
24	Aleksandr Barannikov	Characterisation of polymer 2D X-ray refractive lenses produced by two-photon polymerization lithography in X-ray full-field microscopy mode
25	Anton Narikov	Mini-Transfocator for X-ray focusing techniques and applications
26	Dongbing Liu	Monochromatic X-ray radiography based on logarithmic spiral laue crystals
27	Ari-Pekka Honkanen	Semianalytical approach to solve reflectivity curves of large spherically bent crystal analysers with an arbitrary wafer shape in the isotropic case
28	Peng Qi	The Ultimate Energy Dispersion Condition of A Cylindrical Bent Asymmetric Laue Crystal
29	Shotaro Matsumura	Development of high-quality $\mu$ -channel-cut crystal monochromator for reflection self-seeding of hard X-ray free-electron laser
30	Liubov Samoylova	An in-line bent-crystal spectrometer for MID diagnostic end-station at European XFEL
31	Maxim Polikarpov	Phase-contrast X-ray imaging, microscopy and tomography on EMBL beamline P14 at PETRA III
32	Yanlin Wu	X-ray stroboscopic phase tomography with grating interferometer
33	Koh Hashimoto	Improved reconstruction method of fringe scanning interferometric imaging
34	Hidekazu Takano	Comparison Between Grating-Based Phase Contrast and Zernike Phase Contrast on Laboratory X-Ray Microscope System
35	Chika Kamezawa	Development of measuring method of a sample elasticity by x-ray imaging
36	Lert Chayanun	Using nanofocused X-rays to map carrier collection in single nanowire solar cells
37	Akio Yoneyama	Scanning X-ray Microscope using White Synchrotron Radiation at Saga Light Source
38	Taku Hagiwara	Reflective imaging device using concave-convex mirrors for compact full-field X-ray microscope
39	Jianli Guo	Study on Chemical Reactivity of Organic Materials and Glass
40	Frank Hertlein	New Developments in Microfocus Sources for X-ray Diffractometry
41	Nami Nakamura	Nanobeam diagnosis for XFEL sub-10nm focusing system
42	Takahiro Sato	Compact diagnostic for spatial and temporal overlap determination of XFEL and optical laser pulses using diffusing material