

19th	Category	Chair	Speaker	Presentation title
13:30	ALPS, HEDS & XOPT Joint Session (I)	R. Kodama Osaka University H. Yoneda Univ. Electro-Comm.	K. Tanaka	Implementation of Extreme Light Infrastructure–Nuclear Physics
13:45			M. Campbell	High peak and average power laser research at the Laboratory for Laser Energetics
14:00			P. B. Corkum	Linking high harmonics from solids and gases
14:15			J. Zou	Recent Advances of the Apollon 10 PW Laser
14:30				Break
14:45	ALPS, HEDS & XOPT Joint Session (II)	M. Yabashi RIKEN SPring-8 Center	C. G. Schroer	Perfect X-ray focusing via fitting corrective glasses to aberrated optics
15:00			S. Asai	Probe into vacuum field using high intensity X-ray
15:15				Break
15:30			Break	
15:45			Break	
16:00			Break	
16:15			Break	
16:30			Break	
16:45			Break	

20th	Category	Chair	Speaker	Presentation title	
8:55	Opening		K. Yamauchi	Opening remarks	
9:00	Imaging, microscopy, & Ptychography (I)	H. Mimura The University of Tokyo	A. Menzel	Optics for Lensless X-Ray Microscopy	
9:15			Y. Takahashi	High-resolution hard X-ray spectro-ptychography	
9:30			A. Momose	Recent Developments in X-ray Phase Imaging and X-ray Phase Tomography	
9:45				Break	
10:00				Break	
10:15	Imaging, microscopy, & Ptychography (II)	Y. Takahashi Osaka University	S. Berujon	Progress in X-ray phase contrast imaging based on random modulation	
10:30			R. Ueda	Simultaneous Image Reconstruction of Attenuation, Scatter and Phase Using the Compressed Sensing in Sparse-View Phase CT	
10:45			S. Matsuyama	Achromatic and High-Resolution Full-Field X-ray Microscope and its Applications	
11:00			T. Sakao	Development of precision sub-arcsecond-resolution Wolter mirrors for future X-ray observations of the Sun	
11:15				Break	
11:30			Break		
11:45			Break		
12:00			Break		
12:15			Break		
12:30			Break		
12:45			Break		
13:00			Break		
13:15			Break		
13:30	Optical components & systems (I)	H. Yumoto JASRI	A. Snigirev	X-ray in-line interferometers based on refractive optics	
13:45			Y. Takeo	Development of soft x-ray focusing system with ellipsoidal mirror	
14:00			W. Yun	Advances in Axially Symmetric Microfocus and Nanofocus Xrays	
14:15			D. Shu	Design and Test of a Miniature Dynamic Mirror Bender with Laminar Flexure Bending Mechanism for X-ray Microfocusing	
14:30			V. Yashchuk	The ALS ex situ metrology for x-ray optics: current capabilities, new challenges, and tasks for further developments	
14:45			Break		
15:00			Break		
15:15	Inelastic Scattering & Spectroscopy	M. Yabashi RIKEN SPring-8 Center	A. Baron	Optics and Optical Issues for IXS	
15:30			H. Yavas	Inelastic x-ray scattering and new frontiers in x-ray optics	
15:45			T. Gog	Flat-Crystal Optics for Ultra-High Energy-Resolution Resonant Inelastic X-ray Scattering	
16:00			Y. Shvyd'ko	X-ray Echo Spectroscopy	
16:15			A. Erko	2-Dimensional VLS Gratings for X-ray Spectroscopy and Monochromators with Femtosecond Time Resolution	
16:30			Q. Yi	An improved multi-channel multilayer-mirrors-based EUV/soft X-ray spectrometer developed for the dynamic hohlraum experiment	
16:45					Break
17:00			Break		
17:15			Break		
17:30			Break		
17:45			Break		

21st	Category	Chair	Speaker	Presentation title
8:45	XFEL facilities	Y. Feng SLAC National Accelerator Laboratory	T. Sato	Recent progress and development in hard X-ray instrumentation and applications at LCLS
9:00			Y. Inubushi	Current status and future perspectives of SACLA
9:15			H. Sinn	Status of the European XFEL
9:30			T. Hirano	Hard X-ray Split-and-Delay Optics with wavefront Division at SACLA
9:45				Break
10:00	Photon diagnostics & new techniques	Y. Inubushi JASRI	I. Inoue	Determination of XFEL pulse duration via X-ray intensity interferometry
10:15			I. Snigireva	Tunable Young's double pinhole system coupled with lens for hard X-ray spatial coherence characterization.
10:30			S. Vadilonga	Single bunch extraction by SAW driven bunch chopper
10:45			A. Suzuki	New design of environmental cells as a first step toward 3D imaging in solution by X-ray laser diffraction
11:00				Break
11:15			Break	
11:30			Break	
11:45			Break	
12:00			Break	
12:15			Break	
12:30			Break	
12:45			Break	
13:00			Break	
13:15			Break	
13:30			Break	
13:45			Break	
14:00			Break	
14:15			Break	
14:30			Break	
14:45	Optical components & systems (III)	C. Schroer DESY/University of Hamburg	C. David	Diffraction X-ray Optics: Opportunities for Photon Science at Large Scale Facilities
15:00			C. Morawe	Multilayer based monochromators for upgraded ESRF beamlines
15:15			M. Lebugle	X-ray Kinoform Beamsplitters
15:30			M. Yabashi	Development of X-ray optics for DLSRs
15:45			Break	
16:00	Optical components & systems (IV)	H. Sinn European XFEL	K. Sawhney	Future directions in X-ray Optics at Diamond
16:15			Y. Feng	Variable Resolving Power Soft X-ray Self-Seeding Optical Design
16:30			C. Hardin	Overcoming the Limits of Mirror Performance at LCLS
16:45			D. Morton	KB Mirror Design for the LCLS-II SXR Beam Line
17:00			T. Kolodziej	Studies of diamond endurance to irradiation with x-ray beams of multi kW/mm ² power densities for XFEL application
17:15			T. Ishikawa	Closing remarks
17:30	Closing		Closing remarks	
17:45			Closing remarks	