

Program

Monday, 7 March 2022

10:00 – 17:00	Registration	
12:30	<i>LUNCH</i>	
13:30	Scientific organizers	Welcome and opening
14:00 – 14:45	Sakura Pascarelli (online)	The European XFEL: experimental capabilities and examples of applications
14:45 – 15:30	Marius Schmidt (online)	Time-Resolved Crystallography at XFELs
15:30 – 16:00	Student Poster talks I	
16:00 – 16:30	<i>COFFEE BREAK</i>	
16:30 – 17:30	Poster Session I on site	
17:30 – 18:15	Abbas Ourmazd (online)	Advanced algorithms to reconstruct the three-dimensional structure of non-stationary objects from random, ultra-low-signal sightings of unknown orientation
18:15 – 19:00	Alexander Lichtenstein (online)	Theory of Magnetism and Electronic Correlations
19:00 – 19:15	Stefan Jorda	About the Wilhelm and Else Heraeus Foundation
19:15	<i>DINNER</i>	

Program

Tuesday, 8 March 2022

08:00 – 09:00	<i>BREAKFAST</i>	
09:00 – 09:45	Anders Nilsson (online)	X-rays shine light on the mysterious of water
09:45 – 10:30	Mathias Kläui	Ultra-fast manipulation of collinear and chiral magnetic order
10:30 – 11:00	<i>COFFEE BREAK</i>	
11:00 – 11:45	Thomas Pfeifer	Selecting and driving specific electrons: Atoms and molecules in resonance with intense soft-x-ray FEL light
11:45 – 12:30	Martin Beye	Science Case for seeded soft X-ray FELs
12:30	<i>LUNCH</i>	
14:00 – 14:45	Harald Reichert	First science from the first 4th generation high energy synchrotron radiation source ESRF-EBS
14:45 – 15:30	Claire Donnelly (online)	Coherent X-ray imaging of three-dimensional magnetic systems
15:30 – 16:00	Student Poster talks II	
16:00 – 16:30	<i>COFFEE BREAK</i>	
16:30 – 17:30	Poster Session II on site	
17:30 – 18:15	Sarah Köster (online)	Using focused X-ray beams to study cellular bio-physics
18:15 – 19:00	Arwen Pearson (online)	Time-resolved X-ray crystallographic studies of protein function
19:00	<i>HERAEUS DINNER at the Physikzentrum (cold & warm buffet, with complimentary drinks)</i>	

Program

Wednesday, 9 March 2022

08:00 – 09:00	<i>BREAKFAST</i>	
09:00 – 09:45	Alexandra Pacureanu (online)	Hard X-ray bioimaging at the nanoscale with fourth generation synchrotron sources
09:45 – 10:30	Tim Salditt (online)	High Resolution Phase Contrast X-ray Tomography of Biological Cells and Tissues
10:30 – 11:00	<i>COFFEE BREAK</i>	
11:00 – 11:45	Jan Lüning	Science case for a 4th soft X-ray storage ring facility
11:45 – 12:30	Stefan Eisebitt	Birth, life and death of nanometer-scale spin textures as seen by coherent x-rays
12:30	<i>LUNCH</i>	
14:00 – 14:45	Lucas Schaper	FLASH2020+: A fully coherent soft xray light source at MHz repetition rate
14:45 – 15:30	Gianluca Geloni	Self seeding at hard X-ray FELs
15:30 – 16:00	Student Poster talks III	
16:00 – 16:30	<i>COFFEE BREAK</i>	
16:30 – 17:30	Poster Session III on site	
17:30 – 18:15	Riccardo Bartolini (online)	Design Challenges for 4th generation hard X-ray storage ring source PETRA IV
18:15 – 19:00	Pantaleo Raimondi (online)	Toward a diffraction limited storage ring based X-Ray
19:00	<i>DINNER</i>	

Program

Thursday, 10 March 2022

08:00 – 09:00	<i>BREAKFAST</i>	
09:00 – 09:45	Claudio Masciovecchio (online)	Potential of Free Electron Laser based Nonlinear Optics Experiments
09:45 – 10:30	Gerd Schönhense (online)	New concepts of ToF electron detection
10:30 – 11:00	<i>COFFEE BREAK</i>	
11:00 – 11:45	Curt Preissner (online)	Fast sample positioning systems with nm precision
11:45 – 12:30	Josep Nicolas (online)	Instrumentation issues on modern synchrotron radiation sources
12:30	<i>LUNCH</i>	
14:00 – 14:45	Ana Diaz	X-ray ptychographic tomography at the Swiss Light Source: method development and
14:45 – 15:30	Yong Chu (online)	Current and near-future x-ray microscopy capabilities at NSLS-II
15:30 – 16:00	Student Poster talks IV	
16:00 – 16:30	<i>COFFEE BREAK</i>	
16:30 – 17:30	Poster Session IV online	
17:30 – 18:15	James Sethian (online)	Mathematically-based machine learning for understanding scientific experiments
18:15 – 19:00	Panel discussion	
19:00	<i>DINNER</i>	

Program

Friday, 11 March 2022

08:00 – 09:00	<i>BREAKFAST</i>	
09:00 – 09:45	Heinz Graafsma	Detector Developments at DESY-Hamburg
09:45 – 10:30	Bernd Schmitt	Detector developments for photon science at PSI
10:30 – 11:00	<i>COFFEE BREAK</i>	
11:00 – 11:45	Saša Bajt (online)	X-ray imaging with multilayer Laue lenses
11:45 – 12:30	Raymond Barrett (online)	Optics for Hard X-ray DLSR sources
12:30 – 12:45	Scientific organizers	Closing remarks and poster prize
12:45	<i>LUNCH</i>	

End of Seminar / Departure