



Workshop Soft X-ray Science at PETRA



LOCATION: FLASH Seminar Room, Bldg. 28c, DESY, Notkestraße 85, 22769 Hamburg

29 November 2023, Wednesday	
x-ray imaging of emergent textures	
10:30 – 10:50	<i>Registration with coffee</i>
10:50 - 12:25 Session 1	opening remarks
	Kai Bagschik "Status PETRA IV and Spatial Coherence in the Soft X-ray Range"
	Lisa-Marie Kern "Controlling Magnetic Skyrmions: Generation, Motion and Dynamics"
	Samuel Flewett "3D XRMS Simulations using Python"
12:30 – 13:40	<i>Lunch</i>
13:40 – 15:10 Session 2	Felix Büttner "Coherent imaging with soft x-rays: An opportunity to image emergent states of matter in space and time"
	Simone Finizio "Current status and outlooks in soft X-ray scanning microscopy at the Swiss Light Source"
	Nicolas Jaouen "Magnetic chirality in multilayers probed by soft x-ray (coherent) scattering"
15:10 – 15:40	<i>Coffee break</i>
15:40 – 17:35 Session 3	Christian Schüssler-Langeheine "Probing materials' inhomogeneity with soft x-ray methods"
	Sebastian Wintz "X-ray imaging of spin-wave dynamics"
	Christian Gutt "XPCS with soft X-rays - challenges and opportunities"
	Cornelia Wunderer "Percival 2 Megapixel soft X-ray Imager - Overview, Status, and Future"
17:50 - 18:00	<i>photo</i>
18:00 – 20:30	<i>Posters and Dinner</i>

30 November 2023, Thursday	
soft x-ray photoemission	
09:00 – 10:35 Session 4	opening 2nd part
	Tillmann Buttersack "Sulfite chemistry at the solution-vapor interface"
	Eva Muchova "Non-local relaxation processes following X-ray irradiation of solvated ions"
	Till Jahnke "Recent studies on molecules and small cluster using soft X-rays from P04 and COLTRIMS"
10:35 – 11:00	<i>Coffee break</i>
11:00 – 12:25 Session 5	Dominik Stemer "Photoelectron Circular Dichroism in Aqueous Solutions"
	Andreas Hans "X-ray-induced non-local mechanisms in clusters and liquids investigated by multi-electron-photon coincidence spectroscopy"
	Joshua B Williams "Evidence of Bond Length Dependent Corehole Localization Following L-Edge Photoionization of 1,1-Dichloroethene"
12:25 – 13:45	<i>Lunch and beamline visits</i>
13:45 – 15:40 Session 6	Hans-Joachim Elmers "Observation of time-reversal symmetry breaking in the band structure of Altermagnets and Antiferromagnets"
	Martin Beye "New Applications of RIXS"
	Hendrik Bentmann "Dichroism in soft X-ray photoemission: phase-sensitive contrast in topological quantum materials"
	Hanns Christian Schewe "Conductivity and Reactivity of Liquid Metal Alloys"
15:40 – 16:00	<i>Coffee break</i>
16:00 – 17:50 Session 7	Simon Moser "The Huygens principle of ARPES"
	Kai Rossnagel "Soft x-ray ARPES at P04 and beyond"
	Antje Vollmer "BESSY II, BESSY II+ - soft X-Ray beamlines for materials discovery"
	Moritz Hoesch outlook P04 and soft x-rays at P-IV

1 December 2023, Friday	
soft x-ray spectroscopy	
09:00 – 10:25 Session 8	Claudia Goy "X-ray Emission Spectroscopy of supercooled water droplets"
	Sadia Bari "Functional biomolecular structures probed by soft X-ray action spectroscopy"
	Simon Reinhardt "Soft X-Ray-induced Dimerization of Methane"
10:25 – 10:45	<i>Coffee break</i>
10:45 – 12:30 Session 5	Raimund Feifel "Core-valence double ionisation - local probe of global valence electronic structure?"
	José Crespo "Five decades of controversy about the Fe16+ oscillator-strength ratio finally resolved"
	Michael Martins "Fragmentation and production of molecular ions by soft-X-rays"
	closing remarks: Christian Schroer