

"Future Prospects in momentum microscopy at PETRA III and FLASH" (Mon 22th Jan 2024)

Slot #	Time	Session	Affiliation	Participant	Title
1	12:30	Welcome Session	FLASH	Markus Guhr	Introduction
2	12:40	Instrumentation I	P22	Sergii Chernov	Status of the P22 MM
3	12:50		FLASH	Markus Scholz	Status of the DRUMSOX setup
4	13:00		FLASH	Dmytro Kutnyakhov	Status of the HEXTOF setup
5	13:10		EuXFEL	Manuel Izquierdo	Status of the SXP setup and first results
6	13:25	Coffee break			
7	13:40	Scientific cases I	Uni-Hamburg	Daria Gorelova	Theoretical description of atto- and femtosecond imaging of electron dynamics by means time-resolved photoelectron momentum microscopy
8	13:55		Uni-Kaiserslautern	Benjamin Stadtmüller	Ultrafast k-space dynamics of hot carriers at metal surfaces
9	14:10		Uni-Göttingen	Marcel Reutzel	Momentum microscopy: Dark excitons in 2D materials
10	14:25		STFC	Charlotte Sanders	Time-Resolved Photoelectron Diffraction: Mapping Atomic Motion in Bi2Se3 Phonon Oscillations
11	14:40	Coffee break			
12	14:55	Scientific cases II	Halle	Emily McFarlane	Electronic structure and confinement of deeply buried P and As δ -layers in Si(001)
13	15:10		Uni-Uppsala	Vishal Shokeen	Real-time observation of non-equilibrium phonon-electron energy and angular momentum flow in laser-heated nickel
14	15:25		Uni-Trondheim	Chul Hee Min	Evolution of the 4f dynamics from Mixed-valent TmSe to insulating TmTe
15	15:40		Uni-Mainz	HaJo Elmers	The altermagnetic properties of RuO2
16	15:55	Coffee break			
17	16:10	Scientific cases III	DESY/EuXFEL	Michael Heber	Robustness of topologically protected surface state of Bi2Se3
18	16:25		Princeton	Alice Kunin	Imaging exciton localization in 2D transition metal dichalcogenides
19	16:40		SLAC	Jonathan Sobota	Using coherent phonons to probe electron-phonon coupling
20	16:55		SLAC	Quynh Nguyen	t.b.a.
21	17:10	Coffee break			
22	17:25	ML + Data Analysis	Uni-Kiel	Olaf Landsiedel	Edge AI for Data Analytics in Free-Electron Lasers
23	17:40		Uni-Aahrus	Steinn Ymir Agustsson	SED software package to process MM data
24	17:55	Instrumentation II	Diamond	Matthias Schmitt	Commissioning of a single hemisphere-based time-of-flight momentum microscope for soft x-ray ARPES
25	18:10		Uni-Mainz	Olena Tkach	Core-level CDAD and towards solving the space-charge problem
26	18:25	Discussion	Uni-Kiel	Kai Rossnagel	Future prospects
27	19:00	The End			