

"Prospects of momentum microscopy at PETRA III, FLASH and EuXFEL" (Mon 26th Jan 2026)

Slot #	Time	Session	Affiliation	Speaker	Title	Duration	
1	12:00	Welcome Session	EuXFEL	Serguei Molodtsov	Welcome/Introduction	10 min	
2	12:10	Instrumentation	PETRA III/P22	Sergii Chernov	Status of the MM@P22	10 min	
3	12:20		FLASH	Dmytro Kutnyakhov	Status of the HEXTOF setup	10 min	
4	12:30		FLASH	Markus Scholz	Status of the DRUMSOX setup/Community proposals	10 min	
5	12:40		PETRA III/P04	Moritz Hoesch	Status of MM@P04 - PAX-RIXS	10 min	
6	12:50		EuXFEL	Manuel Izquierdo	Status of the MM@SXP/EuXFEL	10 min	
7	13:00	Coffee break					15 min
9	13:15	Scientific cases I	École Polytechnique	Stefano Ponzoni	Ultrafast surface photovoltage dynamics of InAs(110)	12+3 min	
9	13:30		FHI Berlin	Tommaso Pincelli	Exploring orbital textures with momentum microscopy	12+3 min	
10	13:45		EuXFEL/DESY	Michael Heber	Ultrafast core and valence electron dynamics in charge-density-wave materials	12+3 min	
11	14:00		Uni- West Bohemia	Trung-Phuc Vo	From Low- to High-energy Photoemission and Photoelectron Diffraction: Novel Theoretical Approaches and Kikuchi Diffraction Analysis	12+3 min	
13	14:15	Coffee break					15 min
14	14:30	Scientific cases II	Uni-Konstanz	Martina Müller	Ge1-xSix Single Crystals as a Platform for Ge Hole Spin Qubit Integration	12+3 min	
15	14:45		Uni-Mainz	Hans-Joachim Elmers	XPEEM, Momentum Microscopy, and RIXS in one Instrument	12+3 min	
16	15:00		PETRA III/P22	Volkmar Koller	Lithography for Hard X-Ray Momentum Microscopy	12+3 min	
17	15:15		Uni-Uppsala	Vishal Shokeen	Ultrafast photocurrent and band renormalization in a topological insulator	12+3 min	
18	15:30	Coffee break					15 min
19	15:45	Scientific cases III	Uni-Kiel	Michael Bauer	Visualizing Rabi-Oscillations in Graphene using strong-field time-resolved ARPES	12+3 min	
20	16:00		Uni-Wuerzburg	Hibiki Orio	Ultrafast nonequilibrium dynamics of room temperature charge-density-wave fluctuations in 1T-TiSe ₂	12+3 min	
21	16:15		Uni-Marburg/Regensburg	Ulrich Höfer	Subcycle band-structure videography of lightwave-driven electrons	25+5 min	
23	16:45	Coffee break					15 min
24	17:00	Scientific cases IV	Stanford	Paulina Majchrzak	Visualising and classifying out-of-plane momentum-dependent dynamics in a Weyl semimetal	12+3 min	
25	17:15		SIMES	Dongyu Liu	Resolving collective modes in energy-momentum space using a momentum microscope	12+3 min	
26	17:30		DESY	Jonathan Correa	TimePix4 detector for momentum microscopy applications	12+3 min	
27	17:45		DESY	Markus Scholz	A vision for 2030 momentum microscopy at FELs: Exploring the potential of physics-informed AI in ultrafast experiments	12+3 min	
28	18:00	The End					