



SATELLITE WORKSHOP - Photon Science

15th Workshop on X-Ray Nano-Imaging of Biological and Chemical Systems at PETRA III

Tuesday, 21 January 2025

Flash Seminar Room, Bldg. 28c

The workshop gives attention to x-ray microscopy at various PETRA III beamlines with special emphasis on applications in biology and chemistry. Several scientific (multimodal) X-ray imaging highlights are presented with focus on the scanning X-ray microscopy beamlines P06, P10 and P05. Participants are encouraged to discuss future scientific opportunities for nano-imaging experiments at PETRA III and PETRA IV.

The main part of the workshop is dedicated to presentations from our user community introducing the frontiers of data analysis to encourage lively discussions.

Organisers: G. Falkenberg, F. Westermeier, C.G. Schroer

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PROGRAMME

		Chair: G. Falkenberg
13:30	Introduction	C.G. Schroer
13:45	Diamond-CRL, Varifocal prefocusing and scanning X-ray mirrors	K. Falch
14:00	Multibeam ptychography: unparalleled benefit of parallel imaging	M. Lyubomirskiy
14:15	Nanoparticle distributions at sub- and cellular level	W. Parak
14:45	Optical and Electrical Nanoscopy of Semiconductor Devices	J. Barp
15:15	coffee break	Chair: F. Westermeier
15:45	Phase retrieval for full-field 3d imaging of biological tissues	Jens Lucht
16:15	Dynamic X-ray coherent diffraction analysis: Bridging the timescales between imaging and XPCS	Gerald Hinsley
16:45	A nanoscale view of the structure and deformation mechanism of mineralized shark vertebral cartilage	Vivian Merk
17:15	closing	C.G. Schroer