



SATELLITE WORKSHOP - Photon Science

14th Workshop on X-Ray Nano-Imaging of Biological and Chemical Systems at PETRA III

Wednesday, 24 January 2024

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 and P10. 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, M.Sprung, C.G. Schroer

Contact: Gerald.falkenberg@desy.de

PROGRAMME

		Chair: G. Falkenberg
13:30	Introduction to imaging at Petra III	C.G. Schroer
13:45	Update about Imaging beamlines at PETRA IV	C.G. Schroer
14:15	Refractive diamond optics for nano-imaging: status of in-house fabrication	F. Seiboth
14:45	Advanced mathematical methods for image reconstruction	M. Burger
15:15	P06: Nanoscale study of voids in thin-film solar cells through 3D and multimodal x-ray imaging	G. Fevola
15:45	coffee break	Chair: M. Sprung
16:15	P10: Novel staining strategies for obtaining X-ray-contrast in neural tissue	M. Brecht
16:45	P05: Multiscale morphological analysis of bone microarchitecture around Mg-10Gd implants	S. Sefa
17:15	P07: Low dose Compton X-ray microscopy	S. Bajt
17:45	P10: 3d virtual histology based on X-ray phase contrast tomography - from brain biopsies to organoids	J. Alfken
18:15	P62: SAXS/WAXS Imaging capabilities at the SAXSMAT beamline	S. Haas
18:45	P62 closing	C.G. Schroer