

Workshop "Science at PETRA IV"

Scientific opportunities at a nearly diffraction-limited source

Monday, March 23rd, 2015 at 10:00 am & Tuesday, March 24th, 2015 at 09:00 am

Location: DESY, Hamburg, CFEL building, room no. I-II

Dinner: Extension DESY restaurant/canteen, bldg. 09, March 23rd at 07:00 pm

Monday, March 23rd, 2015		
10:00	Welcome	Weckert, Edgar / DESY
	CHAIR	Salditt, Tim / Uni Göttingen
10:10	PETRA III status and potential upgrade plans	Schroer, Christian / DESY
10:30	XPCS opportunities	Grübel, Gerhard / DESY
10:50	Dynamic heterogeneity in complex materials	Gutt, Christian / Uni Siegen
11:10	Coherent X-ray imaging of crystals with atomic resolution at Diffraction Limited Sources	Vartaniants, Ivan / DESY
11:30	Discussion	
12:00	Lunch	
	CHAIR	Grübel, Gerhard / DESY
13:00	Imaging opportunities	Schroer, Christian / DESY
13:20	Towards time-resolved imaging at the nanoscale: CDI in 3D and 4D	Salditt, Tim / Uni Göttingen
13:40	Local imaging of biological systems - linking structure and function	Köster, Sarah / Uni Göttingen
14:00	Opportunities in materials science	Schreyer, Andreas / HZG
14:20	Fast scanning diffraction with a nanobeam: applications in (bio)materials science	Müller, Martin / HZG
14:40	Coffee	
	CHAIR	Weckert, Edgar / DESY
15:10	Serial synchrotron radiation crystallography	Redecke, Lars / Uni Lübeck
15:30	Opportunities for protein structure determination at PETRA IV	Chapman, Henry / DESY, Uni HH
15:50	Opportunities for in-situ and real-time X-ray scattering	Schreiber, Frank / Uni Tübingen
16:10	Discussion	
19:00	Dinner	Extension DESY canteen/restaurant in building 09
Tuesday, March 24th, 2015		
	CHAIR	Schroer, Christian / DESY
09:00	Surface and nanoscience opportunities	Stierle, Andreas / DESY, UHH
09:20	Nano imaging and nano analysis by exploiting coherence in diffraction	Robinson, Ian / London Centre for Nanotechnology
09:40	Nanomaterials in catalysis - a challenge for chemical imaging	Grunwaldt, J.-D. /KIT
10:00	3D Coherent imaging - necessarily different?	Menzel, Andreas / PSI
10:20	Discussion	
11:00	Coffee	
	CHAIR	Schroer, Christian / DESY
11:30	Challenges and benefits of a nearly diffraction limited x-ray source for time-resolved experiments	Techert, Simone / DESY, MPG, Uni Göttingen
11:50	Opportunities in macromolecular crystallography	Schneider, Thomas / EMBL
12:10	Discussion	
13:00	Lunch	
	CHAIR	Stierle, Andreas / DESY, UHH
14:00	High purity X-ray polarimetry and selected applications	Uschmann, Ingo / Uni Jena
14:20	Soft X-ray nano-spectroscopy	Rosnagel, Kai / Uni Kiel
14:40	Dynamics and magnetism of iron in molecules, cells and individual nanoparticles	Schünemann, Volker / Uni Kaiserslautern
15:00	Exploring structure to property relations of single semiconductor nanowire heterostructures	Pietsch, Ullrich / Uni Siegen
15:20	Extreme, More Extreme, Most Extreme	Dubrovinsky, Leonid / Uni Bayreuth
15:40	Discussion	
16:30	Closing remarks & end of meeting	

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March 20th, 2015