

Quantitative coherent X-ray diffraction imaging

Wednesday, 8th February – 8:45 → 16:00 – Venue: IBS Seminar Room

08:45 – 08:50	Introduction by the organizers	
	<i>Session I – Chair: Steven Leake</i>	
08:50 – 09:30	Keynote: MAUI: Modeling, Analysis and Ultrafast Imaging at Argonne National Laboratory	Ross Harder Argonne National Laboratory, USA
09:30 – 09:50	Bragg coherent diffraction imaging for a look inside nanostructures: catalysis and interface.	M.-I. Richard Univ. de Toulon, IM2NP, France & ESRF, France
09:50 – 10:10	High-resolution three-dimensional crystalline microscopy by single angle Bragg ptychography	M. Allain Institute Fresnel, France
10:10 – 10:30	Characterization of single nanowires with Bragg coherent imaging and ptychography	I. Vartaniants DESY, Germany & MEPhI, Russia
10:30 – 11:00	<i>Coffee/Tea break</i>	
	<i>Session II – Chair: Julio da Silva</i>	
11:00 – 11:40	Keynote: X-ray Ptychography	Pierre Thibault University of Southampton, UK
11:40 – 12:00	Multiple coherent X-ray imaging techniques complemented by X-ray fluorescence for nanoscale 3D quantification of mineralized tissue	A. Pacureanu ESRF, France
12:00 – 12:20	Multiscale X-ray imaging using ptychography	S. Sala University College London, University of Southampton, Diamond Light Source, UK
12:20 – 12:40	High throughput three-dimensional imaging of myelin fibers in the whole mouse brain	F. Chauveau University of Lyon, France
12:40 – 14:00	<i>Lunch</i>	
	<i>Session III – Chair: Marie-Ingrid Richard</i>	
14:00 – 14:40	Keynote: In situ 3D X-ray nanoscopy of mesostructured soft materials	Dag Breiby Norwegian University of Science and Technology, Norway
14:40 – 15:00	Microstructure optimization of titanium alloys produced by additive manufacturing	P. Barriobero-Vila Vienna University of Technology, Austria
15:00 – 15:20	Multi-Scale Imaging and Simulation of Exhaust Gas Catalysis	J. Beil University of Copenhagen, Denmark
15:20 – 15:40	Deactivation of Fluid Catalytic Cracking Catalysts, a Three-Dimensional View of Structural Changes	J. Ihli Paul Scherrer Institute, Switzerland
15:40 – 16:00	Combined use of X-Ray Fluorescence Microscopy, Phase Contrast Imaging Nanotomography and Near-Field Ptychography for high resolution quantitative Fe mapping in inflamed cells	C. Gramaccioni University of Consenza, Italy & Univ. Sapienza, Italy
16:00 – 16:05	Closing	