



SATELLITE WORKSHOP – Photon Science

Helmholtz-Zentrum Hereon GEMS Outstation: Materials Research and High Resolution Imaging

Thursday, 25 January 2024

Helmholtz-Zentrum Hereon operates the research platform GEMS with an outstation at DESY, running beamlines and instruments with a focus on engineering materials research and high resolution imaging techniques. On the 2024 satellite meeting, the status of the Hereon beamlines and future perspectives are reported and users will present recent research highlights.

Organisers: C. Krywka, P. Staron

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PROGRAMME

12:50	Welcome	M. Müller	Helmholtz-Zentrum Hereon
	Session 1: Imaging	Chair: C. Krywka	Helmholtz-Zentrum Hereon
13:00	Imaging instruments at IBL, HEMS and MINAXS	Christina Krywka	Helmholtz-Zentrum Hereon
13:15	An entire human brain cross-section imaged at 2.5 μm voxels in micro-CT	Bert Müller	U Basel
13:40	On stars and spikes: resolving the skeletal morphology of planktonic Acantharia with nano-CT	Vivian Merk	Florida Atlantic U
14:05	Mechanical properties of hard coating materials studies using scanning nanodiffraction	Rainer Hahn	TU Wien
14:30	Coffe Break		
	Session 2: Diffraction	Chair: P. Staron	Helmholtz-Zentrum Hereon
15:00	Status of the diffraction beamlines	Peter Staron	Helmholtz-Zentrum Hereon
15:15	Using the high-energy materials science beamline for research on energy materials	Juraj Todt	Erich Schmid Institut, Montanuniversität Leoben
15:40	Diffraction experiments for engineering materials – laboratory and synchrotron application as complementary measurement strategies	Alexander Liehr	U Kassel
16:05	EASI-STRESS – European activity for standardization of industrial residual stress characterization: Round robin measurements at Po7 and P61A	David Canelo Yubero	Helmholtz-Zentrum Hereon
16:30	Final discussion		