



Helmholtz-Zentrum
hereon



SATELLITE WORKSHOP – Photon Science

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

Wednesday, 28 January 2026

Location: CXNS Bldg. 94, Room O1.104

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 2026 satellite meeting, the status of the Hereon beamlines and future perspectives are reported and users will present recent research highlights.

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PROGRAMME

12:50	Welcome	Martin Müller	Helmholtz-Zentrum Hereon
	Session 1: Imaging		
13:00	Status of the imaging beamlines	Christina Krywka	Helmholtz-Zentrum Hereon
13:10	Structural Evolution of Metal Hydride Powders During Hydrogen Cycling: Tomographic Insights for Storage Systems	Gerd Stahlkopf	Helmholtz-Zentrum Hereon
13:30	Step on the gas! How micro-CT of volcanic bubbles reveals the key role volatiles play in highly explosive low viscosity volcanism.	Corin Jorgenson	University of Strathclyde Glasgow (UK)
13:50	Revealing Plant Functional Dynamics via Environmental Nano-CT for Biomimetic Applications	Linnea Hesse	Universität Hamburg
14:10	Pre-straining in bone tissue: High compressive residual strains compensate for the lack of osteocytes in fishbone	Andreia Sousa da Silveira	Universitätsmedizin Charité Berlin
14:30	Coffe Break		
	Session 2: Diffraction		
15:00	Status of the diffraction beamlines	Peter Staron	Helmholtz-Zentrum Hereon
15:15	High-speed synchrotron radiography of electron beam powder bed fusion	Benjamin Wahlmann	FAU Erlangen
15:40	Investigating the elastic-plastic transition in single- and multiphase alloys at Po7	Benjamin Seligmann	Montanuniversität Leoben
16:05	Investigation of precipitation kinetics in AA7xxx alloys during solid-state processing using HE-SAXS and numerical modeling	Susanne Henninger	Helmholtz-Zentrum Hereon
16:30	Final discussion		

How to find us?

If you arrive by public transport, there is a bus stop right in front of the main gate ("Zum Hünengrab"). The red path is how you get from the main gate to our CXNS building 94. Walk up the red stairway and enter through the glass door on the left, as indicated by the arrow.



