European XFEL Users' Meeting — Satellite meeting

Current and future experiments at the HED instrument Reports from the HIBEF UC.

Wednesday 20.01.2021 – afternoon

Virtual Meeting (Zoom)

In the last two years successful user and commissioning experiments were conducted at the High Energy Density instrument at the European XFEL.
These experiments were in different scientific fields like high-pressure using DAC, ultrafast x-ray heating, inelastic x-ray scattering, polarimetry and much more. During the meeting, first results will be presented. Installation of two major optical laser systems and corresponding experimental setup as well as diagnostic enhanced rapidly in 2020. These devices are provided by the HIBEF User Consortium lead by HZDR. The status of these installations and planned experimental platforms for 2021, such as a laser-shock and pulsed magnetic field setups, will be shown.

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Date

time	What	(who)	(From Institution)
13:00	**Welcome**	U. Zastrau	European XFEL
13:10 – 13:40	Performance review of the HED instrument	K. Appel	European XFEL
13:40 – 14:00	First results from experiments using PP laser, and general fs timing stability between XFEL and optical lasers	M. Nakatsutsumi	European XFEL
14:00 – 14:20	DAC platform: AGIPD minihalf detector, pulsed laser heating, emission spectroscopy and streaked pyrometry	Z. Konopkova	European XFEL
14:20 – 14:40	X-ray heating and inelastic scattering from low-Z materials (user experiment 2020)	D. Kraus	Uni. Rostock
14:40 – 15:10	Break		
15:10 – 15:15	**Welcome**	T. Cowan	HZDR
15:15 – 15:30	Update on a HIBEF proposal for the contribution of a kJ-class laser to the European XFEL	T. Cowan	HZDR
15:30 – 15:50	Performance and status of the High-Intensity (ReLaX) and High-Energy (DiPOLE 100-X) lasers	T. Toncian	HZDR
15:50 – 16:10	Making X-Ray measurements in a harsh laser-plasma environment: challenges and current solutions at HED-HiBEF	A. Laso Garcia	HZDR
16:10 – 16:30	XFEL-induced synthesis of epsilon-iron nitride at high pressures	Huijeong Hwang / Yongjae Lee	Yonsei University Republic of Korea
16:30 – 17:00	HIBEF – General Assembly		