



Status of the HED instrument and the HIBEF contributions and scientific highlights

24.01.2023 at 13:00

Location : **European XFEL, Holzkoppel 4, Schenefeld**, room E1.173

Meeting in-person and virtual

The HED instrument, in cooperation with the HIBEF user consortium, performs experiments in the field of high-pressure science and plasma physics. In the joint satellite meeting latest results of some user experiments as well as status of the experimental opportunities will be represented. In the last year, foci were the spectroscopic possibilities at HED, whereby this year on overview of XFEL operation modes will give some advice for future experiments and new scientific fields are the main topics.

Organiser: Ulf Zastrau
Carsten Baecht

Contact: ulf.zastrau@xfel.eu
c.baecht@hzdr.de

| Date | | | |
|-------|---|---------------|---------------|
| 13:00 | Welcome | U. Zastrau | European XFEL |
| 13:10 | Special modes of operation at SASE2 | G. Geloni | European XFEL |
| 13:40 | The Climate, Astro- & Geo- Pillar in the Centre for Molecular Water Science (CMWS) | G. Gruebel | European XFEL |
| 14:00 | The operational report on the HiBEF lasers | T.Toncian | HZDR |
| 14:20 | Study of ionization dynamics in relativistic laser plasmas using XFEL | M. Mishchenko | European XFEL |
| 14:40 | Coffee break | | |
| 15:10 | Pulsed laser heating combined with MHz X-ray diffraction to study partial melting in Diamond Anvil Cell | G. Morard | ISTerre, UGA |
| 15:30 | X-ray emission spectroscopy from diamond anvil cells at HED | J. Kaa | TU Dortmund |
| 15:50 | X-ray fluorescence from solid density plasmas heated by the European XFEL | G. Williams | IPFN |
| 16:10 | Status of the HIBEF UC | T. Cowan | HZDR |
| 16:30 | Open discussion | | |