

## **Seminar**

### **Surface X-ray Microscopy of High Energy Density Interfaces**

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Ultrashort pulse, high intensity lasers drive solid density matter to extreme conditions having a High Energy Density (HED). The surfaces of this HED matter necessarily provide the first point of interaction between the laser and the plasma. Probing dynamics at the solid density interface remains challenging for optical and laser accelerated particle probes used conventionally - keeping this region out of experimental diagnosis. We present the first results using hard X-ray FEL pulses to directly image this interfacial heating spread in single shot, femtosecond time resolved experiments using an X-ray Reflection Geometry Interfacial Microscope pioneered by us at the HED instrument, EuXFEL.

***Thursday, Sep 10<sup>th</sup> 2026***

***16:00 Hrs (Tea / Coffee 15:45 Hrs)***

***Auditorium, TIFRH***