



Stiftung Institut  
für Werkstofftechnik



## AWT - VDI - Arbeitskreis Werkstofftechnik Bremen 2015 / 2016

### Veranstalter:

Arbeitsgemeinschaft Wärmebehandlung und Werkstofftechnik  
VDI Verein Deutscher Ingenieure

Internetadresse: <http://www.iwt-bremen.de>  
<http://www.vdi-bremen.de>

## **EINLADUNG**

**Mittwoch, den 25.05.16**  
**17.00 Uhr**

**Dr. Graham Appleby**

European XFEL GmbH (Freie Elektronen-Laser-Anlage  
für Materialuntersuchungen, Hamburg)

***Thema: European XFEL and the European Cluster of Advanced Laser Light Sources***

The European X-ray Free Electron Laser (XFEL) Facility is nearing the end of its construction phase in Hamburg, Germany. The 3.4km long facility will generate 27000 pulses per second of ultrabright, coherent X-rays, allowing scientists to observe nanoscale processes at timescales on the order of femtoseconds. With beamlines dedicated to making optimal use of these X-ray pulses for experiments including scattering, diffraction, absorption, photo-electron spectroscopy and imaging, the European XFEL will open up areas of research that were previously inaccessible.

In parallel to the development of the European XFEL, efforts to combine X-ray radiation with laser light are taking place at ESRF in Grenoble and at the Extreme Light Infrastructure (ELI), as well as at the national facilities DESY, PSI, MAX IV, Elettra and HZDR, who develop and operate their own free electron lasers and optical laser driven X-ray beamlines. To generate collaboration and synergy between these sources of X-ray radiation, European XFEL is leading the European Cluster of Advanced Laser Light Sources (EUCALL).

This presentation will outline the European XFEL, its current status and what can be expected in the first years of commissioning, and also provide an introduction to the EUCALL network, its objectives and its scientific progress to date.

Hierzu laden wir Sie herzlich ein.

## **Ort der Veranstaltung**

**Stiftung Institut für Werkstofftechnik,  
Badgasteiner Str. 3, 28359 Bremen  
Seminarraum 1250  
Beginn: 17.00 Uhr**