

X-RAY FREE ELECTRON LASERS: ENTERING THE VIRTUAL LAB

Oct.18-20, 2021, Online focus course



You will

- Be introduced to the world's most intense X-ray source: European XFEL.
- Enter the complex lab setup: Detailed functional view of a contemporary beamline
- Use Virtual Lab to execute your own live experiments at the European XFEL (Hamburg) .
- Look inside each technical component, make live adjustments to align/focus your x-ray beam
- Turn on the laser, and collect physical meaningful pump-probe data for a realistic experiment.
- Techniques covered: Femtosecond X-Ray Emission Spectroscopy and X-Ray Diffraction

Program:

Oct. 18:

Welcome and Lectures: introduction to x-ray free electron lasers (XFEL)
Introduction to the Virtual Lab of the large-scale facility

Oct. 19:

Virtual Lab experiment with femtoseconds x-ray emission spectroscopy

Oct. 20:

Virtual Lab experiment with femtoseconds x-ray diffractions for phase-change materials

Info:

Date: Oct.18-20, 2021

Speakers: Martin Meedom Nielsen (Technical University of Denmark), Christian Bressler (Eu-XFEL and Hamburg University), Shuai Wei (Aarhus University)

Venue: Online with Virtual Lab software.

Fee: Free of charge

Sign up: before Sept. 30. Designed for Master/PhD; others are also welcome. Send email to Christian Bressler [christian.bressler@xfel.eu] or Shuai Wei [shuai.wei@chem.au.dk]