

X-RAY FREE ELECTRON LASERS:

COMBINED VIRTUAL AND REAL LAB EXPERIENCE

Aug.7-Aug.16, 2024, Aarhus+ Hamburg+(Aug.19-23 Lund)



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, X-Ray Diffraction, and others
- Opportunity to perform hands-on experiments at femtoMAX beamline at MAXIV, Lund

Program (*tentative*)

Week 1 (half week) Aarhus: Lectures and exercises

Week 2 Hamburg: XFEL tours + Exercises, DESY/Flash tour and presentations +Virtual Lab experiments and BBQ dinner

Week 3: Home assignment and exam + opportunity of femtoMAX hands-on experiments at MAXIV, Lund

Details:

Class A: [Link for master students](#)

Class B: [Link for PhD students](#)

Info:

Date: Aug.7-16, 2024 Aarhus + Hamburg; (Aug. 19-23, Lund)

Speakers (TBC): Christian Bressler (Eu-XFEL and Hamburg University), Jens Uhlig (Lund University), Shuai Wei (Aarhus University), Yanwen Sun (SLAC), Tomoki Fujita (Aarhus)

Venue: Aarhus University, EU-XFEL and DESY campus (Hamburg), MAXIV (Lund).

ECTS: 5.

Sign up: deadline: May 15, 2024

Open for both master and PhD students

Send emails to following to receive instruction for registration:

Christian Bressler, Uni-Hamburg [christian.bressler@xfel.eu]

Shuai Wei, Aarhus Uni [shuai.wei@chem.au.dk]

Jens Uhlig, Lund Uni [jens.uhlig@chemphys.lu.se]