

Announcement & Invitation

Lecture on

**Electron Microscopy, Holography and Spectroscopy
Summer Semester 2026**

Prof. Dr. Axel Lubk

WHERE? REC/C118

WHEN? Wednesday, 6. DS (16:40 – 18:10)

First lecture: 15th April 2026

OPAL: <https://bildungsportal.sachsen.de/opal/auth/RepositoryEntry/44014338049>

WHO? Bachelor, Master and PhD Students in Physics

The lecture will be given in English. Hands-on experience optional.

Topics: interaction of fast electrons with matter, general design of an electron microscope, contrast mechanisms and wave optics, high-resolution imaging and atomic lattice analysis, electron diffraction and symmetry determination, electron holography and electric / magnetic field mapping, electron tomography and 3D characterization, electron energy loss spectroscopy at low and large energy losses for optoelectronic property analysis and chemical mapping.