



## **Announcement & Invitation**

## Lecture on

## Foundations of Charge Particle Optics

Winter Semester 2025/2026

## Prof. Dr. Axel Lubk

WHERE? REC/C118/U

WHEN? Thursday, 6. DS (16:40 – 18:10)

First lecture: 16<sup>th</sup> October 2024

**OPAL:** <a href="https://bildungsportal.sachsen.de/opal/auth/RepositoryEntry/32448610304?8">https://bildungsportal.sachsen.de/opal/auth/RepositoryEntry/32448610304?8</a>

WHO? Bachelor, Master and PhD Students in Physics

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

Topics: electric and magnetic fields in charge particle optics (CPO), Hamiltonian equations of motion, paraxial approximation, aberrations, ray tracing, basic elements (e.g., round lens, sector magnet) and modern applications (energy filter, monochromator, electron microscope, focused ion beam)



