



Announcement

Principles of Geometrical Light Optics

Prof. Harald Rose

Description

The lecture is aimed at students in the Physics Master programme and will cover the fundamentals of geometric optics. Under the ray approximation, the photon is assumed to be a massless particle and its propagation in a medium with a variable refractive index will be calculated similarly to quantum mechanics. On the basis of this principle, the ray equations will be derived the optical Eikonal introduced, from which it is possible to derive the Abbe sine condition and the setup of an ideal light microscope.

Teaching Method

The lecture is structured as in the following:

- Block course at the end of the semester: 5 days, 4 hours per day, timetable not available yet.
- Seminar: a topic will be assigned to each student during the semester, and a talk has to be given on the assigned topic during the block course.
- Lab: selected experiments will be carried on by the students during the block course.

First meeting

tba

Lecturer

Prof. Harald Rose, Electron Microscopy Group of Materials Science