

Physikalisches Kolloquium



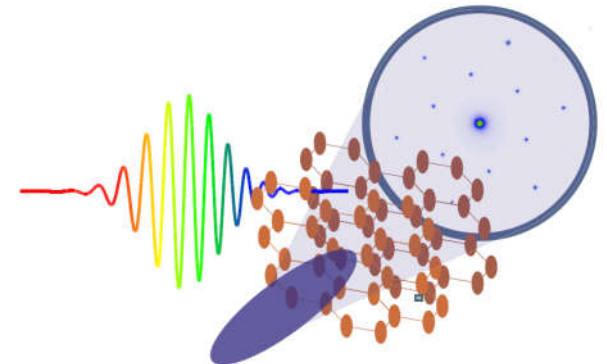
Thursday, 01.11.2018, 16:15, HS 100
Reception with coffee & cookies 15:45
(For university staff: please bring your own cup for sustainability reasons)

Dr. Arne Senftleben, Universität Kassel:

Introductory talk: Ultrafast structural dynamics

Abstract

How do atoms in molecules or solid states systems evolve in time on the onset of a chemical reaction or change in physical conditions? To answer this question, one needs to dynamically resolve the atomic structure on the time scales of atomic motion - which are between femtoseconds and picoseconds. One way to achieve this is to use very short electron pulses to create structural snapshots of the process by diffraction. I will discuss two classes of experiments: In one class, a short electron pulse generated by a femtosecond UV laser pulse diffracts on a laser-excited solid state sample while in the other case the imaging electron is emitted from within a molecule that is being imaged under the influence of a strong laser pulse.



All of you interested in physics are cordially invited!