

Westfälische Wilhelms-Universität Münster



Fachbereich Physik

> Allgemeines Physikalisches Kolloquium

> Donnerstag, 01.06.2017 um 16 Uhr c.t.

Prof. Dr. Claus Ropers

Universität Göttingen



Imaging and spectroscopy with ultrashort electron pulses

Electron microscopy and diffraction are among the most powerful techniques to investigate the nanoscale structure of materials, as well as local electric and magnetic fields. Time-resolved electron imaging promises unprecedented insight into the dynamic response of systems excited out of equilibrium. A key to the realization of such technologies is the generation of high-quality beams of ultrashort electron pulses.

This talk will present the development and application of novel measurement schemes employing ultrashort electron pulses in different scenarios. In particular, recent progress on ultrafast electron



diffraction from surfaces and ultrafast transmission electron microscopy will be discussed.

Kolloquiums-Kaffee ab 16 Uhr vor dem Hörsaal Wilhelm-Klemm-Straße 10 Institutsgruppe 1 Hörsaal HS 2