

FAKULTÄT für PHYSIK
LUDWIG-MAXIMILIANS-UNIVERSITÄT
MÜNCHEN/GARCHING

PHYSIK-DEPARTMENT
TECHNISCHE UNIVERSITÄT MÜNCHEN
MÜNCHEN/GARCHING

MLL-KOLLOQUIUM

Donnerstag, 28.11.2013, 16¹⁵ Uhr

Hörsaal der LMU in Garching, Am Coulombwall 1
Treffen zum gemeinsamen Kaffee 16 Uhr

Dr. Fritz Keilmann

(LMU München, Soft Condensed Matter group)

Spectroscopic infrared near-field nanoscopy for mapping chemical composition, electronic conduction and plasmonic fields

While the sharp tip of a scanning probe microscope (e.g. AFM) allows to map a specimen's surface relief (topography), the additional illumination of this tip enables a simultaneous optical mapping; luckily, the optical image results at the same high AFM spatial resolution of typically 20 nm. The tremendous enhancement over classical (diffraction-limited) light microscopy is especially striking for long-wavelength infrared and THz radiation. The talk will introduce the underlying concept of near fields and highlight results in solid-state physics, biomineralization, and graphene plasmonics.

gez. Peter Thiorlf
Tel. 289-14064

gez. Norbert Kaiser
Tel. 289-12367