

**Prof. Dr. P. D. Esquinazi**  
**Prof. Dr. B. Rosenow**



Sächsische Forschergruppe FG877

**UNIVERSITÄT LEIPZIG**

**Fakultät für Physik und Geowissenschaften**

Institute für Physik

# Physik-Kolloquium

**Dienstag, den 13.12.2011, 17:00 Uhr**

**Prof. Dr. Jochen Feldmann**

**Nanosystems Initiative Munich (NIM)**  
**Department of Physics, LMU Munich**

## **Focusing Light on Gold Nanoparticles**

Nanoplasmonics with metal nanoparticles has opened up a range of opportunities in enhancing and manipulating optical signals, in sensing small amounts of chemical material and in introducing novel diagnostic tools. The interaction of metal nanoparticles with focused laser light leads to a series of new phenomena, which can be exploited in applications ranging from lithography to cell transfection.

I will discuss experiments regarding optical force lithography, plasmonic heating, optical listening, laser printing and sub-diffraction milling. In all cases we exploited the unique behavior of metal nanoparticles within a laser trap.

**Ort: Hörsaal für Theoretische Physik, Linnéstraße 5**

**Alle Teilnehmer sind ab 16:30 Uhr zu Kaffee vor dem Hörsaal eingeladen.**