

# PHYSIKALISCHES KOLLOQUIUM

Mittwoch, 17.10.2012, um 17:15 Uhr

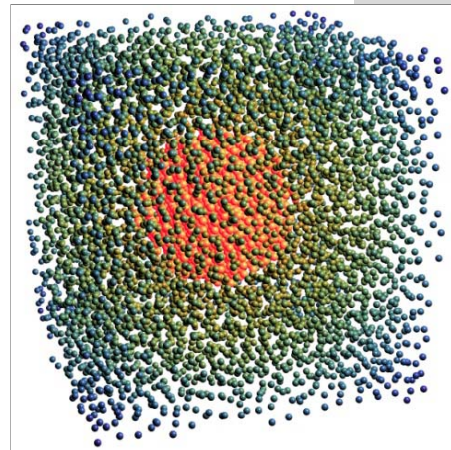
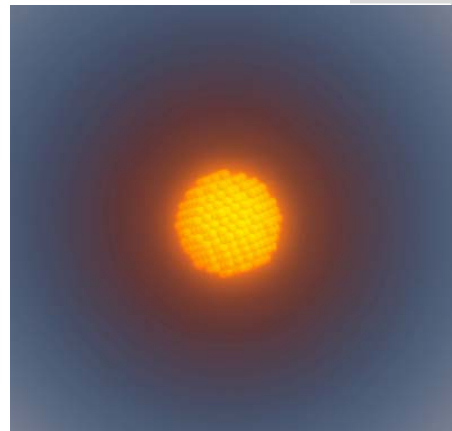
Ort: Reichenhainer Str. 90; Neues Hörsaalgebäude, Raum: 2/N013



**Prof. Dr. Klaus Kroy**  
Universität Leipzig

## ***Hot Brownian Motion***

*Hot Brownian motion is the stochastic motion of suspended nanoparticles that are persistently heated above the solvent temperature, e.g. by absorbed laser light. I discuss a Markovian theory that maps their nonequilibrium motion onto ordinary equilibrium Brownian motion, with effective temperature and friction parameters. I show how to explicitly calculate these parameters, which are the key ingredients of a practical rational approach to emerging photothermal trapping and tracking techniques and self-thermophoretic nano-machines.*



Alle Zuhörer sind ab 17:00 Uhr zum Kaffee vor dem Hörsaal eingeladen.