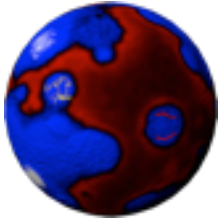
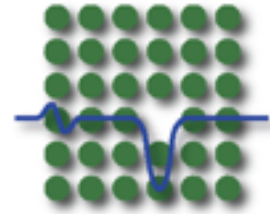


Prof. Dr. F. Cichos



Sächsische Forschergruppe FOR877



**Molecular
Nanophotonics**

MONA-/ FOR877- Seminar

Thursday, 12th July, 2012, 11:00 a.m., SR 224

Dr. Raphaël Lévy

Institute of Integrative Biology, University of Liverpool, UK

Nanoparticles in Cells: How do they get in and what can you do with them?

Progress in the synthesis, biofunctionalization and optical detection of nanoparticles lead to a range of opportunities for applications of those materials in imaging and sensing of biological processes. I will briefly review our work on the use of peptides to finely tune the surface properties and interactions of gold nanoparticles with enzymes. I will then report on our work on the entry and fate of gold and iron oxide nanoparticles in live cells and discuss the main barriers towards widespread applications of photothermal microscopy for single molecule imaging inside cells.