### **Universität Leipzig**

Fakultät für Physik und Geowissenschaften Institut für Theoretische Physik

#### **Seminar**

# Festkörperphysik

Am Donnerstag, 14.04.2011, um 15:15 Uhr spricht

### Prof. Dr. Hans Frauenfelder

Los Alamos National Laboratory

über

## "The Complexity of Proteins"

Abstract:

Proteins are complex systems. The complexity is based on frustration; a protein can assume a very large number of conformational substates that have different structures, and are described by an energy landscape. Protein dynamics is only partially determined internally; the hydration shell and the surrounding solvent dominate the major motions. The dynamics and function of a "simple" protein, myoglobin, can be explored by a variety of experimental tools, for instance flash photolysis, dielectric relaxation, the Mössbauer effect, and neutron scattering. The resulting picture shows how the dynamics of the protein and its environment control the function.

Ort: SR 224, Linnéstraße 5

Interessenten sind herzlich eingeladen!

gez. Prof. Haase und Prof. Rosenow