DIESE WOCHE

PHYSIKALISCHES KOLLOQUIUM

des Fachbereichs Physik der Johann Wolfgang Goethe-Universität Frankfurt

Mittwoch, den 18.06.2014, 14.30 Uhr c.t. Raum 02.116 a + b, Max-von-Laue-Str. 1

Bitte beachten Sie die geänderte Anfangszeit und Raumnummer !

Prof. David Leitner

University of Nevada, Reno, USA

"Dynamics and energy transfer at the protein-water interface"

Terahertz spectroscopy of solvated proteins reveals that a hydration layer can extend quite far from the surface of a protein. In the first part of the talk I present results of recent THz experiments and molecular simulations of antifreeze proteins. In the second part I discuss energy transfer at the protein-water interface. Recent measurements of local temperature within the cell indicate that thermal transport coefficients of the cell may be much smaller than those of bulk water. To address this possibility I present results of calculations of thermal transport coefficients of proteins and the protein-water interface.

Die Dozenten der Physik