

The Theoretical and Computational Biophysics Group
An NIH Resource for Macromolecular Modeling and Bioinformatics
Beckman Institute for Advanced Science & Technology
University of Illinois at Urbana-Champaign, 405 N. Mathews Avenue, Urbana, IL 61801 USA



ILLINOIS
UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

"Hands-On" Workshop on Computational Biophysics

at the

Max Planck Institute of Biophysics

Max-von-Laue-Str. 3, Frankfurt am Main

20th - 23rd March 2006



MAX-PLANCK-GESELLSCHAFT

The workshop will explore physical models and computational approaches used for the simulation of biological systems and the investigation of their function at an atomic level. The course will be based on case studies including the properties of membranes and membrane proteins, mechanisms of molecular motors, trafficking in the living cell through water and ion channels, and signaling pathways. Relevant physical concepts, mathematical techniques, and computational methods will be introduced, including force fields and algorithms used in molecular modeling, molecular dynamics simulations on parallel computers and steered molecular dynamics simulations.

The workshop is designed for graduate students and postdoctoral researchers in computational and/or biophysical fields who seek to extend their research skills to include computational and theoretical expertise, as well as other researchers interested in theoretical and computational biophysics. Theory sessions in the morning will be followed by hands-on computer labs in the afternoon in which students will be able to set up and run simulations.

For more information visit:

<http://www.ks.uiuc.edu>

and

<http://www.mpibp-frankfurt.mpg.de/workshop>

