BDBDB3 -

3 rd Biological Diffusion and Brownian Dynamics Brainstorm

October 7-9, 2013

Heidelberg, DE

Studio Villa Bosch

Registration Deadline, July 5th, 2013

Experiment-Theory-Computations-Software

Aims

The goal of BDBDB3 is to provide a forum for intensive discussions about the state-of-the-art in Brownian Dynamics simulations of biological macromolecules and related methodologies.

Participants will include theoreticians and experimentalists. Speakers will be encouraged to present work in progress and discuss speculative ideas.

Topics

- Measurements of macromolecular diffusion
- Calculation of binding rate constants;
- Membrane diffusion and association;
- Colloids;
- Nano-particles, and
- Surface-protein interactions;
- Macromolecular crowding;
- Hydrodynamic interactions;
- Macromolecular dynamics and flexibility;
- Approaches to multi-scale simulation.

Confirmed speakers

Rommie E. Amaro (University of California in San Diego, USA)
Nathan A. Baker (Pacific Northwest National Laboratory in Richland, USA)
Paolo Mereghetti (Center for Nanotechnology Innovation in Pisa, Italy)
Michael Feig (Michigan State University, USA)
Tihamér Geyer (University Saarland, Germany)
Dirk-Peter Herten (University Heidelberg, Germany)
Gary Huber (University of California in San Diego, USA)
Wonpil Im (University of Kansas, USA)
Michael Knop (University Heidelberg, Germany)
Franziska Matthäus (University Heidelberg, Germany)
Ralf Metzler (University of Potsdam, Germany)
Gideon Schreiber (Weizmann Institute of Science, Israel)
Stefan Seeger (University of Zürich, Switzerland)
Nico van der Vegt (University Darmstadt, Germany)
Matthias Weiss (University Bayreuth, Germany)
Irene Yarovsky (RMIT University, Australia)
Huan-Xiang Zhou (Florida State University, USA
Karim ElSawy (Qassim University, SA)

HITS

BIOMS

IWR Interdisciplinary Center for Scientific Computing

NBCR

http://mcm.h-its.org/BDBDB3