Workshop on Single molecule thermodynamics

Thursday, Nov. 26 and Friday, Nov. 27, 2009

Organized by Dean Astumian and Hermann Gaub

Thursday, Nov. 26

Location: CAS, Seestr. 13

9:00: Introduction and greeting - Hermann Gaub and Dean Astumian

9:15 - 10:15: Hermann Gaub (Ludwig-Maximillians-University, LMU, Munich)
Single Molecule Experiments - Advantages and Limitations

10:15 - 10:30: Coffee Break

10:30-11:30: Imre Derenyi (Eotvos University, Budapest)
Thermodynamically consistent model for Kinesin

11:30 - 11:45: Coffee Break

11:45 - 12:45: Andrew Turberfield (Oxford University)
Making molecular motors out of DNA - Lessons from DNA walkers

12:45 - 14:30: Lunch break

14:30 - 15:30: Michelle Campisi (University of Augsburg)
Quantum Fluctuation Theorems

15:30-15:45: Coffee Break

15:45-16:45: Chris Van den Broeck (Hasselt University, Belgium)
Lessons in reversibility

16:45-17:45: Ulrich Gerland (LMU Munich)
Equilibrium and non-equilibrium physics of nucleosome positioning

19:00: Dinner

Friday → see next page

Friday, Nov. 27

Location: LMU Munich, Amalienstr. 54, Chair of Prof. Gaub

9:00 -10:00: Dean Astumian (University of Maine and LMU)
Thermodynamics and kinetics of molecular machines

10:00-10:15: Coffee Break

10:15-11:15: Dieter Braun (LMU Munich)
Experiments on Linear and Non-Linear Thermophoresis

11:15-11:30: Coffee Break

11:30-12:30: Miguel Rubi (University of Barcelona)
Single molecule thermodynamics (preliminary title)

12:30 - 14:30: Lunch break

14:30 - 17:00: Round table discussion on equilibrium vs. non-equilibrium and the meaning of single molecule thermodynamics