

Schedule

The ZiF-research group:

"Stochastic modeling in the sciences"

Workshop on

**"Microscopic stochastic dynamics in
biology and chemistry"**

(August 17-19, 2005)

Wednesday, August, 17:

8.50h - 9.00h: Opening

9.00h - 9.50h: S.N. Evans (Berkeley): "Mutation-selection balance and mortality: a measure-valued dynamical system"

10.00h – 10.50h: H. Bolterauer (Giessen): "Walking molecules: Models and simulations for kinesin and myosin"

11.00h - 11.30h: Coffee break

11.30h – 12.20h: M. Droz (Geneva): "Modeling population dynamics with or without evolution: the role of fluctuations"

12.30h – 14.00h: Lunch

14.00h – 14.50h: A. Wakolbinger (Frankfurt a.M.): "Ergodic behaviour of locally regulated branching populations"

15.00h - 15.50h: M. Möhle (Tübingen): "Partition structures induced from coalescent processes"

16.00h-16.30: Coffee break

16.30h - 17.10h: V.A. Malyshev (INRIA Rocquencourt): "What could be simplest models of biological networks - network of thermodynamic compartments"

Thursday, August, 18:

9.00h - 9.50h: A. Dress (Leipzig): “Network Techniques in Phylogenetic Analysis: Can Statistics Help to Interpret the Relevant Parameters?”

10.00h – 10.50h: P. Tass (Jülich) : “Stochastic phase resetting analysis of visual evoked responses”

11.00h - 11.30h: Coffee break

11.30h – 12.20h: Y. Maistrenko (Jülich): “High-deminsional chaos in the Kuramoto model of coupled phase oscillators”

12.30h – 14.00h: Lunch

14.00h – 14.50h: J. Schweinsberg (San Diego): “Continuous-state branching processes and small-time behavior of beta coalescents”

15.00h - 15.50h: W. Stannat (Bielefeld): “On the stability properties of genetic algorithms”

16.00h-16.30: Coffee break

16.30h - 17.10h: I. Grigorescu (Miami): “Scaling limits for a Catalytic Fleming-Viot type system”

17.15h – 17.55h: N. Champagnat (ENS): “A microscopic interpretation for a Markov jump process of evolution in adaptive dynamics”

18.30h Dinner

Friday, August, 19:

9.00h - 9.50h: A. Greven (Erlangen): “Stochastic spatial population models with selection and mutation”

10.00h – 10.50h: J. Tuszynski (Edmonton): “The role of thermal fluctuations in protein structure and function: myoglobin, tubulin and kinesin”

11.00h - 11.30h: Coffee break

11.30h – 12.20h: V. Rusov (Odessa): “t.b.a.”

12.30h – 14.00h: Lunch

14.00h – 14.50h: A. Andreev (Helsinki): “Multidimensional nonparametric modeling of recurrent events by Bayesian data augmentation”

15.00h – 15.50h: C. Richard (Bielefeld): “Solvable parameters for models of trees”

16.00h-16.30: Coffee break

16.30h - 17.10h: L. Bogachev (Leeds): “Annealed Lyapunov exponents for branching random walks in random media”

17.15h: End