

**Stochastic Approaches to Evolution****Gothenburg, 26-30 May 2007**

Evolution remains Nature's grand example of interplay between Chance and Necessity. How this interplay may come about, in general, or in detail is the topic of this workshop on stochastic aspects of evolution, where mathematicians and biologists will meet.

This is a joint arrangement between the Stochastic Centre and the newly established [Gothenburg Centre for Theoretical Biology](#).

Saturday the 26th will be arrival day, real work will start on Sunday morning and continue until Wednesday evening 30 May. Most activities will take place at the [Jonsered Manor](#), close to Gothenburg.

The organising and programme committee consists of Patsy Haccou, Peter Jagers, Sylvie Meleard, Hans Metz, and Serik Sagitov. For information, please contact Peter Jagers, [jagers@chalmers.se](mailto:jagers@chalmers.se)

**Lecturers include:**

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| Ellen Baake (Bielefeld):         | Stochastic and deterministic aspects of recombination. <a href="#">Abstract</a>   |
| Julien Berestycki (Marseille):   | Mutation patterns for populations with very large families  |
| Matthias Birkner (Berlin):       | Likelihood-based inference for multiple merger coalescents. <a href="#">Abstract</a>  |
| Nicolas Champagnat (Berlin):     | The limit of rare mutations in finite logistically regulated populations: including genetic drift in adaptive dynamics models. <a href="#">Abstract</a> |
| Elena Dyakonova (Moscow):        | Reduced branching processes in random environment. <a href="#">Abstract</a>   |
| Tom JM Van Dooren (Leiden):      | Evolutionary stability on phenotype landscapes. <a href="#">Abstract</a>  |
| Kimmo Eriksson (Mälardalen):     | Modeling coevolution of cultural capacities and cumulative culture  |
| Alison Etheridge (Oxford):       | Evolution in a spatial continuum  |
| Stefan Geritz (Helsinki):        | Trait substitution sequences as a model for discrete evolution. <a href="#">Abstract</a>  |
| Patsy Haccou (Leiden):           | Effects of deleterious mutations on the evolution of reproductive modes   |
| Olle Häggström (Gothenburg):     | No free lunch? How Dembski abuses mathematics to discredit Darwinism  |
| Christine Jacob (Jouy-en-Josas): | Semi-semi-Markov processes: a generalized renewal approach for individual based branching processes. <a href="#">Abstract</a>                           |
| Peter Jagers (Gothenburg):       | Paths to Extinction   |
| Fima C. Klebaner (Melbourne):    | How did we get here? Large Deviations approach to Galton-Watson   |
| Amaury Lambert (Paris):          | Marginals, coalescence and sampling for 'general' branching processes. <a href="#">Abstract</a>   |
| Russell Lande (San Diego):       | Fitness in a fluctuating environment  |
| Olof Leimar (Stockholm):         | Adaptation and diversification in fluctuating environments  |
| Torbjörn Lundh (Gothenburg):     | Sympatric speciation under reinforcement. <a href="#">Abstract</a>  |
| John McNamara (Bristol):         | The importance of individual differences for games of conflict and the evolution of cooperation. <a href="#">Abstract</a>                               |
| Bernhard Mehlig (Gothenburg):    | An accurate model for genetic hitch-hiking  |

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| Sylvie Méléard (Paris):   | Quasistationary distributions and diffusion models in population dynamics  |
| Geza Meszena (Budapest):  | Fluctuation-induced niche segregation  |
| J. A. J. Metz (Leiden):   | Attempts at a contribution to the post-modern synthesis: explorations at the interface between meso- and macro-evolution. <a href="#">Abstract</a> |
| Martin Möhle (Düsseldorf):  | On the number of cuts needed to isolate the root of a random recursive tree. <a href="#">Abstract</a>  |
| Peter Pfaffelhuber (Munich):  | The evolution of genealogical trees. <a href="#">Abstract</a>  |
| Andrea Pugliese (Trento):   | Evolution of pathogen virulence in a variable host population. <a href="#">Abstract</a>  |
| Jörgen Ripa (Lund):   | Adaptive Dynamics in Stochastic Environments   |
| Serik Sagitov (Gothenburg):   | A bare bones model of evolutionary branching   |
| Viet Chi Tran (Paris):  | A stochastic particle model of age-structured populations and adaptive evolution   |
| Vladimir Vatutin (Moscow):  | Critical branching processes in random environment die slowly. <a href="#">Abstract</a>  |
| Anton Wakolbinger (Frankfurt):  | How often does the ratchet click? Facts, heuristics, asymptotics. <a href="#">Abstract</a>   |
| Further participants: Jean Bertoin, Anton Bovier, Anders Eriksson, Jose-Luis Garmendia, Karin Hårding, Erik Kristiansson, Bernhard Mehlige, Andreas Nordvall Lagerås, Marita Olsson, Oskar Sandberg, Jeff Steif, David Sumpter, Sofia Tapani.   |  |
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