

ESI

**The Erwin Schrödinger International
Institute for Mathematical Physics**

Boltzmannngasse 9
A-1090 Wien, Austria

**Workshop on
FRONTIERS IN MATHEMATICAL BIOLOGY**

April 14th - April 19th, 2008

Organizers: R. Bürger, J. Hermisson

Keynote Opening Lectures

Monday April 14th, 2008

17:30 – 18:30 Steven N. Evans (Berkeley)
What has “Life” done for me lately
19:00 BUFFET

Tuesday April 15th, 2008

9:30 – 10:30 Peter Schuster (Vienna)
The advantage of using mathematics in biology
COFFEE

Workshop Talks

Tuesday April 15th, 2008

11:00 – 12:00 Bob Griffiths
*Harmonic measure and fixation probabilities of types for
genetic drift*

LUNCH BREAK

15:00 – 16:00 Nick Barton
A limit to the rate of adaptation
COFFEE

16:30 – 17:30 Anton Wakolbinger
How often does the ratchet click?

Wednesday April 16th, 2008

9:30 – 10:30 Alison Etheridge
A new model for evolution in a spatial continuum
COFFEE

- 11:00 – 12:00 Matthias Birkner
Inference for lambda-coalescents
LUNCH BREAK
- 15:00 – 16:00 Judith Miller
Inference of selection on quantitative traits in subdivided populations
COFFEE
- 16:30 – 17:30 Thomas Lenormand
An alternative theory for the dominance of mutations

Thursday April 17th, 2008

- 9:15 – 10:15 John Wakeley
Conditional gene genealogies under strong purifying selection
COFFEE
- 10:45 – 11:45 Francois Rousset
Multilocus models in spatially structured populations
- 12:00 – 13:00 Hamish Spencer
Population structure and the maintenance of genetic variation
LUNCH BREAK
- 15:15 – 16:15 Ellen Baake
Stochastic and deterministic aspects of recombination
COFFEE
- 16:45 – 17:45 Peter Pfaffelhuber
Approximating genealogies under genetic hitchhiking with recurrent mutation
SOCIAL EVENT (HEURIGER)

Friday April 18th, 2008

- 9:15 – 10:15 Carsten Wiuf
Parametric inference in coalescent models
COFFEE
- 10:45 – 11:45 Anita Winter
Coalescent trees and their evolution
- 12:00 – 13:00 Reinhard Bürger
Multilocus migration-selection models

All lectures take place at the ESI Boltzmann Lecture Hall

This workshop is co-sponsored by the Vienna Science and Technology Fund (WWTF)