ESI **The Erwin Schrödinger International Institute for Mathematical Physics** Boltzmanngasse 9 A-1090 Wien, Austria

Mathematical population genetics and statistical physics

February 17th -- February 21st, 2003

Monday, 17th February

10.00 -- 11.00 J. Gillespie: Is the population size of a species relevant to its evolution?

coffee break

11.30 -- 12.30 B. Griffiths: Importance sampling on evolutionary histories of samples of genes

lunch break

15.00 -- 16.00 W. Stephan and Y. Kim:
Selective sweeps in the presence of interference among partially linked loci

coffee break

16.30 -- 17.30 P. Slade: Non-neutral genealogical structure

Tuesday, 18th February

10.00 -- 11.00	G. Kersting:	Path decompositions for Markov chains
		coffee break
11.30 -- 12.30	A. Etheridge:	The distribution of surviving blocks of ancestral genome
		lunch break
15.00 -- 16.00	M. Moehle:	Forward and backward diffusion processes in exchangeable population models
		coffee break
16.30 -- 17.30	M. Notohara:	Effects of population structure on the genealogy and DNA polymorphism for sampled genes

Wednesday, 19th February

09.00 -- 10.00	M. Benaim:	Self interacting diffusion
10.30 -- 11.30	X.-S. Zhang:	Pleiotropic mutations, selection and genetic variation in quantitative traits
		coffee break
12.00 -- 13.00	D. Metzler:	Statistical alignment based on fragment insertion and deletion models

Thursday, 20th February

10.00 -- 11.00 J. Geiger: The shape of large Galton-Watson trees

coffee break

11.30 -- 12.30 H.-O. Georgii: Multitype Galton-Watson processes: the ancestral types of typical individuals

lunch break

15.00 -- 16.00 P. Pfaffelhuber: The finite system scheme for state-dependent multitype branching processes

coffee break

16.30 -- 17.30 A. Sturm: A coalescent incorporating mutation and selection

Friday, 21st February

09.30 -- 10.30 A. Wakolbinger: Hierarchical equilibria of branching populations

coffee break

11.00 -- 12.00 W. Angerer: Realistic models of cell proliferation in fluctuation analysis

lunch break

14.00 -- 15.00 P. Jagers: Branching processes in random, near critical environments

farewell coffee