



# Stochastic Processes in Evolutionary and Disease Genetics August 7 - 12, 2004



## MEALS

Breakfast (Continental): 7:00 – 9:00 am, 2<sup>nd</sup> floor lounge, Corbett Hall, Sunday – Thursday

\*Lunch (Buffet): 11:30 am – 1:30 pm, Donald Cameron Hall, Sunday – Thursday

\*Dinner (Buffet): 5:30 – 7:30 pm, Donald Cameron Hall, Saturday – Wednesday

Coffee Breaks: As per daily schedule, 2<sup>nd</sup> floor lounge, Corbett Hall

\*Please remember to scan your meal card at the host/hostess station in the dining room for each lunch and dinner.

## MEETING ROOMS

**All lectures are held in the main lecture hall, Max Bell 159.** *Please note that the meeting space designated for BIRS is the lower level of Max Bell, Rooms 155-159. Please respect that all other space has been contracted to other Banff Centre guests, including any Food and Beverage in those areas.*

## SCHEDULE

### Saturday, August 7

5:30-7:30 pm                      Buffet Dinner, Donald Cameron Hall  
7:30 pm --                         Informal gathering, 2<sup>nd</sup> floor lounge, Corbett Hall

### Sunday, August 8

8:45--9:00    Andrea Lundquist: Intro to BIRS facilities  
9:00--10:00   Peter Jagers: Branching processes with biological applications  
10:00--10:30   Coffee, 2<sup>nd</sup> floor lounge, Corbett Hall  
10:30--11:30   Rick Durrett: Genome rearrangements  
11:30--12:15   Vlada Limic: Rigorous results for the NK model  
12:15--13:30   Lunch  
15:30--16:00   Coffee  
16:00-17:00   Ted Cox: The stepping stone model  
17:00--18:00   Jochen Geiger: The tree structure of a  $k$ -sample from a large Galton-Watson generation  
18:00--19:30   Dinner

## **Monday, August 9**

9:00--9:45 Matthias Birkner: Continuous-mass stable branching and its resampling counterpart

9:45--10:45 Tom Kurtz: Particle representation for population models

10:45—11:15 Coffee

11:15--12:15 John Wakeley: Coalescent theory -- an introduction

12:15--13:30 Lunch

15:30--16:00 Coffee

16:00--16:30 Martin Moehle: TBA

16:30--17:00 Steve Krone: Stochastic Demography, Coalescents, and Effective Population Size

17:00--18:00 John Gillespie: Stochastic processes in evolution: Do you know what you are estimating?

18:00--19:30 Dinner

## **Tuesday, August 10**

8:30--9:15 Yuseob Kim: The hitchhiking effect and inference of beneficial mutations

9:15--10:00 Paul Fearnhead: TBA

10:00--10:30 Coffee

10:30--11:00 Anja Sturm: The coalescent for a population model with selection and mutation

11:00-11:30 Paul Joyce: Evaluating the theory of adaptive evolution: Do two Wrongs make a Wright?

11:30--12:00 Rasmus Nielsen: Population Genetic Analysis of Ascertained SNP Data

12:00--12:15 Group photo

12:15--13:30 Lunch

FREE AFTERNOON

17:30--19:30 Dinner

20:00-21:00 Andrew G. Clark: Stochastic processes in evolutionary and disease genetics

## **Wednesday, August 11**

9:00-10:00 Robert C. Elston: TBA (Overview talk human genetics)

10:00-10:30 Coffee

10:30-11:15 Françoise Clerget-Darpoux: Is it possible to adopt a standardized strategy for the study of multifactorial diseases

11:15--12:15 Jurg Ott: Case-control association studies and the "Curse of Dimensionality"

12:15--13:30 Lunch

15:30--16:00 Coffee

16:00--17:00 Elizabeth Thompson: Genealogy and genome sharing in diploid populations

17:00--18:00 Mark Daly: Background, Implementation and Application of a Human Haplotype Map

18:00--19:30 Dinner

## **Thursday, August 12**

9:00--10:00 Matthew Stephens: Detecting recombination hotspots from patterns of genetic variation in population samples

10:00--10:30 Coffee

10:30--11:30 Peter Donnelly: Recombination rate variation, *in silico* genotyping, and measuring information content in SNP maps for disease studies

11:30--13:30 Lunch

Checkout by 12 noon.