



International Workshop on Monte Carlo Methods for Spatial Stochastic Systems 21-23 July 2015, Brisbane, Australia

Tuesday 21st July

08:30-9:00 Registration

9:00-9:15 Welcome and opening

9:15-10:15 **Gareth Roberts (University of Warwick)**
Towards not being afraid of the big bad data set

10:15-10:45 Morning tea

10:45-11:15 **Matthew Roughan (Adelaide University)**
Fast generation of spatially embedded random graphs

11:15-11:45 **Morgan Grant (The University of Queensland)**
Complex network simulation

11:45-12:15 **Bruce Tabor (CSIRO)**
A novel bootstrap for Ripley's K derived from theory and Monte Carlo simulation



12:15–13:15 Welcome BBQ Lunch on the Terrace

13:15–13:45 **Tim Garoni (Monash University)**

The worm process for the Ising model is rapidly mixing

13:45–14:15 **Matt Moores (University of Warwick)**

Scalable inference for the inverse temperature of a hidden Potts mode

14:15–14:45 **Rohan Shah (The University of Queensland)**

Sequential importance resampling for graph connectivity

14:45–15:15 Afternoon tea

15:15–16:30 Free time

Wednesday 22nd July

9:30–10:30 **Jose Blanchet (Columbia University)**

Optimal exact simulation of max-stable random fields

10:30–11:00 Morning tea



- 11:00-11:30 **Phil Pollett (The University of Queensland)**
Metapopulations in dynamic landscapes
- 11:30-12:00 **Somayeh Shiri (Monash University)**
Simulation of large deviation functions of discrete stochastic traffic models
- 12:00-13:00 Lunch
- 13:00-13:30 **Christopher Drovandi (Queensland University of Technology)**
Likelihood-free methods for spatial stochastic models of collective cell spreading
- 13:30-14:00 **Dirk Kroese (The University of Queensland)**
Fitting Laguerre tessellations to tomographic image data
- 14:00-14:30 **Kevin Burrage (University of Oxford and Queensland University of Technology)**
Using ideas from the numerical solution of ordinary differential equations to construct efficient methods for discrete stochastic chemical kinetics problems
- 14:30-15:00 Afternoon tea
- 15:00-16:00 **Dirk Kroese (The University of Queensland)**
Advanced Sampling and Exploration Matlab Competition
- 16:00-16:30 Free time



18:30 Dinner at Hillstone Restaurant, St Lucia Golf Course
Dress: smart casual

Thursday 23rd July

9:15-10:15 **Adrian Baddeley (Curtin University)**
Closure relations in spatial processes

10:15-10:45 Morning tea

10:45-11:15 **Christian Davey (Monash University)**
A Bayesian approach for sampling from multimodal distributions

11:15-11:45 **Robert Kohn (The University of Queensland)**
Markov interacting importance samplers

12:15-12:30 Final discussion and close