2009/10 EPSRC Symposium on the Mathematics of Complexity Science and Systems Biology

# Workshop on <br> Non-equilibrium dynamics of spatially extended interacting particle systems 11-13 January 2010 

Organizers: C Connaughton, S Grosskinsky, O Zaboronski, R Rajesh (IMS, Chennai, India) Mathematics Institute • Zeeman Building • University of Warwick<br>08:55-09:00 Welcome from the organiser<br>\section*{Coffee, tea and meals in the} Maths Common Room

## Monday, January 11

09:00-09:40 Eli Ben Naim, Strong Mobility in Disordered Systems
09:45-10:25 Nikolai Brilliantov, Aggregation and fragmentation kinetics: Application to planetary rings
10:30-11:00 Coffee Break
11:00-11:40 Alain Comtet, Capture of Particles and Distribution of the Maximum of a One-Dimensional Random Walk
11:45-12:25 Malte Henkel, Local scale-invariance and ageing phenomena: where do we stand
12:30-14:00 Lunch
14:00-14:40 R. Rajesh, Coarsening in Cooling Granular Gases
14:45-15:25 Claude Godreche, Dynamics of condensation in zero-range processes
15:30-16:00 Tea Break
16:00-16:40 Ronald Dickman, Contact Process with Mobile Disorder
16:45-17:25 David Mukamel, Effective Long-Range Interactions in Driven Systems with Local Dynamics
18:30
Dinner

Tuesday, January 12
09:00-09:40 Satya Majumdar, Convex Hull of $\boldsymbol{N}$ Planar Brownian Motions: Exact Results and an Application to Ecology
09:45-10:25 Sergey Petrovskii, Statistical Mechanics of Population Dynamics and Animal Movement
10:30-11:00 Coffee Break
11:00-11:40 Mauro Mobilia, Modelling Biodiversity and Pattern Formation in Communities Exhibiting Cycle Dominance
11:45-12:25 Uwe C. Tauber, Stochastic Predator-Prey Models: Population Oscillations, Spatial Correlations, and the Effect of Randomized Rates
12:30-14:00 Lunch
14:00-14:40 Martin Howard, Modelling Noisy Concentration Gradients in Developmental Biology
14:45-15:25 Martin Evans, Growth of Population in Catastrophic Environments
15:30-16:00 Tea Break
16:00-18:00 Short presentations and Discussion
18:30
Dinner

Wednesday, January 13
09:00-09:40 Deepak Dhar, Growing sandpiles: A model of Proportionate Growth
09:45-10:25 Beate Schmittman, From asymmetric exclusion processes to protein synthesis
10:30-11:00 Coffee Break
11:00-11:40 Federico Vazquez, Microscopic Dynamics to Macroscopic Behaviour in Systems With Two Symmetric Absorbing States
11:45-12:25 Thierry Bodineau, On long range correlations in non-equilibrium systems
12:30-14:00 Lunch
14:00-15:00 Henrik Jensen, Cluster geometry and survival probability in systems driven by reaction-diffusion dynamics 15:00 Tea Break and end

