

# Spring Term 2008/2009

## Monday 2 & Tuesday 3 February 2009

### Condensation, aggregation and coagulation in particle systems

Organisers: Stefan Grosskinsky & Oleg Zaboronski

*All talks will be in the Complexity Seminar Room D1.07, Mathematics Institute, Zeeman Building  
Lunch, tea and catered dinner are in the Complexity Common Area right outside D1.07*

#### Monday 2nd February 2009

- 10:00 - 12:00 **Introduction for complexity students**  
12:00 - 13:00 Sandwich lunch  
13:00 - 13:40 **John Cardy** (Oxford)  
*Random curves in 2d and diffusion-aggregation processes in 1d*  
13:45 - 14:25 **Henrik Jensen** (Imperial)  
*Cluster geometry and survival probability in systems driven by reaction-diffusion dynamics*  
14:30 - 15:10 **Martin Howard** (Norwich)  
*Modelling noisy concentration gradients in developmental biology*  
15:15 - 16:00 Tea break  
16:00 - 16:40 **Markus Kraft** (Cambridge)  
*Coupling algorithms for calculating sensitivities of population balances*  
16:45 - 17:25 **Vassili Kolokoltzov** (Warwick)  
*Dynamic law of large numbers and central limit theorem with the estimates of error terms for Smoluchowski's coagulation and Boltzmann collisions*  
17:30 - 18:10 **James Norris** (Cambridge)  
*Smoluchowski's equation for Brownian coagulation*  
18:30 Dinner

#### Tuesday 3rd February 2009

- 9:00 - 9:40 **Colm Connaughton** (Warwick)  
*Nonlocal mass cascades in cluster-cluster aggregation*  
9:45 - 10:25 **Amanda Turner** (Lancaster)  
*Planar aggregation and the coalescing Brownian flow*  
10:30 - 11:00 Coffee break  
11:00 - 11:40 **Rosemary Harris** (QMUL)  
*Current fluctuations in stochastic particle systems with condensation*  
11:45 - 12:25 **Martin Evans** (Edinburgh)  
*Matrix representation of the stationary measure for the multispecies asymmetric simple exclusion process*  
12:30 - 13:30 Sandwich lunch  
13:30 - 14:10 **Tomohiro Sasamoto** (Munich)  
*The dynamics of a tagged particle in 1D TASEP*  
14:15 - 14:55 **Volker Betz** (Warwick)  
*Bose-Einstein condensation and infinite cycles in random permutations*  
15:00 - 15:40 **Stefan Adams** (Warwick)  
*A 'slingshot' model for symmetrised systems of Brownian bridges*  
15:45 Tea break and end

Talks will be held in the Mathematics Institute, Zeeman Building, University of Warwick  
For detailed MIR@W programmes please see our website: [go.warwick.ac.uk/miraw/days](http://go.warwick.ac.uk/miraw/days)