## Information for participants

# Microscopic descriptions and mean-field equations in physics and social sciences

Bath Spring School, 12–16 May 2014

### Schedule

	Monday	Tuesday	Wednesday	Thursday	Friday
9:15 - 10:05	9:15 Registration 9:45 Opening	Peletier	Gomes	Huang	Norris
10:15 - 11:05	Jabin	Jabin	Jabin	Gomes	Gutiérrez
11:05 - 11:30	Coffee break	Coffee break	Coffee break	Coffee break	Coffee break
11:30 - 12:20	Peletier	Gomes	Norris	Norris	Zimmer
12:20 - 14:15					
14:15 - 15:05	Gomes	Jabin	Carrillo	Einav	
15:05 - 15:30	Coffee break	Coffee break	Coffee break	Coffee break	
15:30 - 16:20	Bruna	Velázquez	Choi	Peletier	
16:30 - 17:20		Poster session			
Evening					

#### Courses

D. Gomes. Introduction to the regularity theory for mean-field games

- P.-E. Jabin. Mean field limit for systems of many particles
- J. Norris. Fluid limits for some mean-field particle systems
- M. Peletier. From Diffusion to Reaction via Gamma-convergence

#### Talks

- M. Bruna. Finite-size effects in diffusion
- J. A. Carrillo. Minimizers of Interaction Energies
- Y.-P. Choi. Mean-field limit and propagation of chaos for aggregation equations
- A. Einav. Of Chaos and Chaotic States in Kac's Model
- S. Gutiérrez. On estimates for kinetic equations and applications to models of chemotaxis
- **Y. Huang.** Stability of self-propelled particle systems and existence of flocking solutions for the continuum limit
- C. Mouhot. Semigroup approaches to many-particle limits
- J. J. L. Velázquez. Singularity formation for kinetic equations with cubic nonlinearities
- J. Zimmer. Entropic flows, stochastic perturbations and microscopic models

# Location

The school takes place at the Department of Mathematical Sciences of the University of Bath, in the Wolfson Lecture Theater 4W 1.7, circled in red in the map below.

