

2016-17 Warwick EPSRC Symposium

Emerging PDE models in Socio-Economic Sciences

15-19 May 2017

Organisers: C. Elliott (Warwick), P. Markowich (Cambridge and KAUST), M.-T. Wolfram (Warwick)

PROGRAMME

All lectures will take place in Room B3.03

Monday

- 12:00-14:00 Registration in Room B1.37, Lunch in the Mathematics Common Room
14:00-14:45 **Eitan Tadmor** (University of Maryland and ETH Zurich)
Emergence and regularity of alignment-based PDE models with a commutator structure
14:50-15:20 **Sara Merino-Aceituno** (Imperial)
Continuum dynamics of the intention field under weakly cohesive social interaction
15:20-15:50 Coffee break in the Mathematics Common Room
15:50-16:35 **Martin Burger** (WWU Munster)
Gradient flow structures on graphs and mean-field limits
16:40-17:25 **Yanghong Huang** (Manchester)
Steady states of a non-local interaction model for two species with cross-diffusion
18:00-19:30 Welcome dinner in the Mathematics Common Room

Tuesday

- 09:30-10:15 **Diogo Gomes** (Kaust)
Stationary mean field games with congestion
10:20-10:50 **Ewelina Zatorska** (Imperial)
Transport of congestion in two-phase compressible/incompressible flow
10:50-11:10 Coffee break in the Mathematics Common Room
11:10-11:55 **Massimo Fornasier** (TU Munich)
Title TBC
12:00-12:30 **Claudia Totzeck** (TU Kaiserslautern)
Particle systems and their mean-field limits in conjunction with optimisation
12:30-14:00 Lunch in the Mathematics Common Room
14:00-14:45 **Jan Haskovec** (Kaust)
Discrete and continuum modeling of biological network formation
14:50-15:20 **Rosemary Harris** (QML)
Modelling the "peak-end rule" of behavioural economics: random walkers with extreme value memory
15:20-15:50 Coffee break in the Mathematics Common Room
15:50-16:35 **Dejan Slepcev** (Carnegie Mellon)
Transportation networks with fastest average commute times

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