

# EPSRC Workshop: Topics In Control Program

Wednesday (30 Nov)

9:00-14:00	Registration		MRC
13:00-14:00	Lunch		Maths common room
14:00-14:45	Jochen Bröcker	Sensitivity and out-of-sample error in data assimilation	B3.03, Zeeman
15:00-15:45	Marta D'Elia	A statistical approach to data assimilation for hemodynamics	MS.01, Zeeman
15:45-16:15	Coffee break		Maths common room
16:15-17:00	Vassili Kolokoltsov	Game theoretic analysis of incomplete markets: emergence of probabilities, nonlinear and fractional Black-Scholes equations	MS.01, Zeeman
17:00-17:45	Adam Ostaszewski	Suppression of bad news in markets: explicit equilibrium analysis of correlated optimal data censors	
17:45-18:30	Amol Sasane	A new $v$ -metric in control theory	
18:30-20:30	Reception and poster session		Maths common room

Thursday (1 Dec)

9:00-11:00	Individual discussion session		
11:00-11:45	Peter Imkeller	New results on (F)BSDE of quadratic growth	Westwood Lecture Theatre
11:45-12:30	Tusheng Zhang	Singular control of SPDEs and backward SPDEs with reflection	
12:30-13:15	Stefan Ankirchner	Optimal trade execution under price-sensitive risk preferences	
13:15-14:30	Lunch		
14:30-15:15	Nick Bingham	Multivariate prediction and matrix Szegő theory	
15:15-15:45	Robert Mackay	Control of complex systems	
15:45-16:15	Coffee break		
16:15-17:00	Olivier Guéant	Mean field games on graph	
17:00-17:45	Minyi Huang	Decentralized decision making in mean field stochastic systems	
17:45-18:30	Wei Yang	Mean field games and nonlinear Markov processes	
19:30-22:00	Dinner		Arden House

Friday (2 Dec)

9:00-9:45	Boualem Djehiche	Some applications of the Stochastic Maximum Principle	Westwood Lecture Theatre
9:45-10:30	Saul Jacka	Minimizing the shuttle time for a diffusion	
10:30-11:00	coffee break		
11:00-11:45	Ilya Pavlyukevich	Planar dynamical systems perturbed by heavy-tailed Lévy noise	
11:45-12:30	JiangLun Wu	Optimal control of SDEs associated with general Lévy generators	
12:30-13:15	Astrid Hilbert	Differentiable approximation of Lévy and fractional processes	
13:15-14:30	Lunch		
14:30-15:15	Alexei Piunovskiy	Fluid approximation to controlled Markov chains with local transitions	
15:15-16:00	Natalia Rozhenko	Passive realizations of stationary stochastic processes	
16:00-16:45	Kody Law	Filtering the Navier-Stokes equation	