EPSRC Workshop on

Topics in Control

Institute of Mathematics, Warwick University

30 November 2011 - 2 December 2011

Organisers: Kody Law, Wei Yang

Programme

Wednesday 30 November

9:00-12:00	Registration in Room B1.37	
12:45-13:45	*Lunch in the Mathematics Institute Common Room*	
13:45-14:00	*Photograph (in the Street, Mathematics Institute)*	
14:00-14:45	**Jochen Bröcker**	*Sensitivity and out-of-sample error in data assimilation* (Room B3.03, Mathematics Institute)
15:00-15:45	**Marta D'Elia**	*A statistical approach to data assimilation for hemodynamics* (Room MS.01, Mathematics Institute)
15:45-16:15	*Coffee in the Mathematics Institute Common Room*	
16:15-17:00	**Vassili Kolokoltsov**	*Game theoretic analysis of incomplete markets: emergence of probabilities, nonlinear and fractional Black-Scholes equations* (Room MS.01, Mathematics Institute)
17:00-17:45	**Adam Ostaszewski**	*Suppression of bad news in markets: explicit equilibrium analysis of correlated optimal data censors* (Room MS.01, Mathematics Institute)
17:45-18:30	**Amol Sasane**	*A new v-metric in control theory* (Room MS.01, Mathematics Institute)
18:30-20:30	Reception and poster session in the Mathematics Institute Common Room	

Thursday 1 December (All lectures in Westwood Lecture Theatre)

9:00-11:00	Individual discussion session	
11:00-11:45	**Peter Imkeller**	*New results on (F)BSDE of quadratic growth*
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 in Westwood Lecture Theatre Foyer*	
14:30-15:15	**Nick Bingham**	*Multivariate prediction and matrix Szegö theory*
15:15-15:45	**Robert Mackay**	*Control of complex systems*
15:45-16:15	*Coffee in Westwood Lecture Theatre Foyer*	
16:15-17:00	**Adam Kowalewski**	*Boundary Control of time-varying delay parabolic systems with non-differentiable performance functionals*
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 at Arden House, Warwick University campus*	

Friday 2 December (All activities in Westwood Lecture Theatre)

9:00-9:45	**Boualem Djehiche**	*Some applications of the Stochastic Maximum Principle*
9:45-10:30	**Saul Jacka**	*Minimizing the shuttle time for a diffusion*
10:30-11:00	*Coffee in Westwood Lecture Theatre Foyer*	
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*
12:30-13:00	**Astrid Hilbert**	*Differentiable approximation of Lévy and fractional processes*
13:15-14:30	*Lunch in Westwood Lecture Theatre Foyer*	
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*

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For further information on these and other events see: **go.warwick.ac.uk/mathsevents**
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