Nonlinear PDE for Future Applications

− Optimal Control and PDE −

Date	17 July, 13:30 ∼ 21 July, 16:20
Place	Kawai Hall, Tohoku University
organizer	Shigeaki Koike (Tohoku U)
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Program

17 July (Mon)

13:30−14:30	W. Gangbo (UCLA) On a Mean Field Game equation I
14:50−15:50	A. Święch (Georgia IT) HJB equations, dynamic programming principle and stochastic optimal control I
16:10−17:10	G. Peskir (U Manchester) Nonlinear problems of optimal mean-variance trading strategies I

18 July (Tue)

10:00−11:00	W. Gangbo (UCLA) On a Mean Field Game equation II
11:20−12:20	A. Święch (Georgia IT) HJB equations, dynamic programming principle and stochastic optimal control II
14:00−15:00	G. Peskir (U Manchester) Nonlinear problems of optimal mean-variance trading strategies II
15:20−15:50	A. R. Mészáros (UCLA) Density constraints and regularity issues in first order Mean Field Games.
16:00−16:30	C. Mou (UCLA) Perron's method for nonlocal fully nonlinear equations
16:40−17:10	H. Kaise (Osaka U) Convergence of discrete-time games to path-dependent Isaacs PDEs with quadratically growing Hamiltonians

19 July (Wed)

10:00−11:00	W. Gangbo (UCLA) On a Mean Field Game equation III
11:20−12:20	A. Święch (Georgia IT) HJB equations, dynamic programming principle and stochastic optimal control III

14:00−15:00	G. Peskir (U Manchester) Nonlinear problems of optimal mean-variance trading strategies III
15:20−15:50	N. Ichihara (Aoyama Gakuin U) Qualitative properties of generalized principal eigenvalues for viscous Hamilton-Jacobi equations
16:00−16:30	T. Namba (U Tokyo) Well-posedness of fully nonlinear PDEs with Caputo's time-fractional derivative
16:40−17:10	G. Galise (U Roma) Liouville theorems for a family of very degenerate elliptic non linear operators

20 July (Thu)

10:00−11:00	W. Gangbo (UCLA) On a Mean Field Game equation IV
11:20−12:20	A. Święch (Georgia IT) HJB equations, dynamic programming principle and stochastic optimal control IV
14:00−15:00	G. Peskir (U Manchester) Nonlinear problems of optimal mean-variance trading strategies IV
15:20−15:50	Y. Fujita (Toyama U) On a geometrical property of Hamilton-Jacobi flow starting from some pathological function
16:00−16:30	H. Mitake (Hiroshima U) Derivation of multi-layered interface system and its application
16:40−17:10	N. Hamamuki (Hokkaido U) On surface evolutions under some dynamic boundary conditions

21 July (Fri)

10:00−11:00	W. Gangbo (UCLA) On a Mean Field Game equation V
11:20−12:20	A. Święch (Georgia IT) HJB equations, dynamic programming principle and stochastic optimal control V
14:00−14:50	M. Kubo (Tohoku U, IMR) Molecular Dynamics Simulation on Crystal Growth Processes
15:10−15:40	Q. Liu (Fukuoka U) On small and large exponent limits of power mean curvature flow equation
15:50−16:20	K. Takasao (U Tokyo) Phase field method for mean curvature flow with a non-local term