Hamilton-Jacobi PDEs Culminating Workshop

Monday June 8, 2020

8:15–12:00 *Session Chair Adam Oberman (McGill University)*

8:20–8:30 *Welcome & Introduction (Dima Shlyakhtenko and Adam Oberman)*

8:30–9:10 **Lorenzo Rosasco** (Università di Genova)
Efficient learning with random projections

9:20–9:30 *Break*

9:30–10:10 **Andrew Stuart** (California Institute of Technology)
Supervised Learning In Banach Space (Approximation Theory For Operators)

10:20–10:30 *Break*

10:30–11:10 **Jianfeng Zhang** (University of Southern California (USC))
HJB Equations in Wasserstein Space and Viscosity Solutions

Tuesday June 9, 2020

8:15–12:00 *Session Chair Levon Nurbekyan (UCLA)*

8:30–9:10 **Dima Shlyakhtenko** (Institute for Pure and Applied Mathematics)
Large-N limit of random matrix models

9:20–9:30 *Break*

9:30–10:10 **David Jekel** (University of California, Los Angeles (UCLA))
The large-n behavior of certain random matrix models through free probability and non-commutative function theory

10:20–10:30 *Break*

10:30–10:50 **Jerome Darbon** (Brown University)
On Hamilton-Jacobi PDEs and image denoising models with non-additive noise

10:55–11:05 *Break*

11:05–11:25 **Stanley Osher** (University of California, Los Angeles (UCLA))
(joint talk with Wuchen Li) Controlling Propagation of Epidemics via Mean-Field Games

Thursday June 11, 2020

12:00 *Schedule Change: No Talks on Wednesday, June 10 - Moved to Thursday, June 11 [In Observance of #ShutDownSTEM Day: shutdownstem.com]*

Thursday June 11, 2020

8:15–12:00 *Session Chair Jerome Darbon (Brown University)*

8:30–9:10 **Augusto Gerolin** (Vrije Universiteit Amsterdam)
Learning normalizing flows from Entropy-Kantorovich potentials

9:20–9:30 *Break*

9:30–10:10 **Aaron Palmer** (University of British Columbia)
The Ising Game

10:20–10:30 *Break*

10:30–10:50 **Levon Nurbekyan** (University of California, Los Angeles (UCLA))
Primal-dual methods for the mean-field game (MFG) and control (MFC) problems via monotone inclusions

10:55–11:15 *Discussion and Closing Remarks (Adam Oberman)*

11:15 *Conclusion*