

Mean Field Games

Monday August 28, 2017

- 8:00–8:50 *Check-In/Light Breakfast (Hosted by IPAM)*
- 8:50–9:00 *Welcome and Opening Remarks*
- 9:00–10:50 **Francois Delarue** (Université de Nice Sophia Antipolis)
Probabilistic approach to mean field games. An overview.
- 10:50–11:10 *Break*
- 11:10–11:50 **Roland Malhame** (École Polytechnique de Montréal)
Min_LQG games and collective discrete choice problems
- 12:00–2:00 *Lunch (on your own)*
- 2:00–2:40 **René Carmona** (Princeton University)
Quantifying the efficiency (or lack thereof) of Nash equilibria in Mean Field Games
- 2:50–3:30 **Amarjit Budhiraja** (University of North Carolina)
Scaling Limits for Large Stochastic Networks
- 3:40–4:00 *Break*
- 4:00–4:40 **Thaleia Zariphopoulou** (University of Texas at Austin)
(CANCELLED DUE TO HURRICANE HARVEY) Mean-field and n-agent games for optimal investment under relative performance criteria
- 4:30–6:00 *Poster Session & Reception (Hosted by IPAM)*

Tuesday August 29, 2017

- 8:00–9:00 *Check-In/Breakfast (Hosted by IPAM)*
- 9:00–10:50 **Diogo Aguiar Gomes** (King Abdullah Univ. of Science and Technology (KAUST))
Monotonicity methods for mean-field games
- 10:50–11:10 *Break*

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- 11:10–11:50 **Pierre Cardaliaguet** (Université de Paris IX (Paris-Dauphine))
A PDE approach for the second order master equation
- 12:00–2:00 *Lunch (on your own)*
- 2:00–2:40 **Adrian Tudorascu** (West Virginia University)
On differentiability in the Wasserstein space of probability measures
- 2:50–3:30 **David Ambrose** (Drexel University)
Existence theory for mean field games with non-separable Hamiltonian
- 3:40–4:00 *Break*
- 4:00–4:40 **Luca Nenna** (Université de Paris IX (Paris-Dauphine))
Second Order Mean Field Games and Entropy Minimization
- 4:50–5:30 **Stamatios Katsikas** (University of Warwick)
Combined Evolutionary and Mean-Field Setting for the Pressure- Resistance Games on Networks

Wednesday August 30, 2017

- 8:00–9:00 *Check-In/Breakfast (Hosted by IPAM)*
- 9:00–10:50 **Peter Caines** (McGill University)
Mean Field Game Theory for Systems with Partial Observations and its Applications to Execution Problems in Finance
- 10:50–11:10 *Break*
- 11:10–11:50 **Jean-Pierre Fouque** (University of California, Santa Barbara (UCSB))
Mean Field Games with Delay
- 12:00–2:00 *Lunch (on your own)*
- 2:00–2:40 **Ulrich Horst** (Humboldt-Universität)
A mean-field game of optimal portfolio liquidation
- 2:50–3:30 **Adam Oberman** (McGill University)
A PDE Approach to Regularization in Deep Learning
- 3:40–4:00 *Break*
- 4:00–4:40 **Ronnie Sircar** (Princeton University)
Oligopoly Mean Field Games
- 4:50–5:30 **Ramesh Johari** (Stanford University)
Pricing in Ride-Share Platforms: A Queueing-Theoretic Approach

Thursday August 31, 2017

- 8:00–9:00 *Check-In/Breakfast (Hosted by IPAM)*
- 9:00–9:50 **Stanley Osher** (University of California, Los Angeles (UCLA))
Numerical Methods for Mean Field Games - Part One
- 10:00–10:50 **Yat Tin Chow** (University of California, Los Angeles (UCLA))
Numerical Methods for Mean Field Games - Part Two
- 10:50–11:10 *Break*
- 11:10–11:50 **Pierre Degond** (Imperial College)
On the interplay between kinetic theory and game theory
- 12:00–2:00 *Lunch (on your own)*
- 2:00–2:40 **Inwon Kim** (University of California, Los Angeles (UCLA))
Cross diffusion: drift systems and density constraint
- 2:50–3:30 **Tamer Basar** (University of Illinois at Urbana-Champaign)
Risk-Sensitive and Robust Mean Field Games
- 3:40–4:00 *Break*
- 4:00–4:40 *Panel Discussion: Open Problems & Challenges*

Friday September 1, 2017

- 8:00–9:00 *Check-In/Breakfast (Hosted by IPAM)*
- 9:00–9:40 **Hamidou Tembine** (New York University)
Mean-Field-Type Games
- 9:50–10:30 **Ullmo Denis** (Université Paris-Sud (Orsay))
Schrödinger approach to Mean Field Games
- 10:40–11:00 *Break*
- 11:00–11:40 **Minyi Huang** (Carleton University)
Mean field competitive binary Markov decision processes and structured solutions
- 11:50–12:00 *Closing Remarks*
- 12:00 *Conclusion*

