

Mean Field Games and Applications

May 4 - 8, 2020

Scientific Overview

This week-long workshop on Mean Field Games (MFG) and Applications for has a number of goals: (i) to gather together leading researchers in MFG and certain cognate areas (economics, optimal transportation, finite dimensional Hamilton-Jacobi equations, Stochastic equations, applied control, numerics). (ii) to expose new researchers to the promise of the field and its array of challenges, while grounding them in its basic techniques; (iv) to make available to the wider community a series of broad interest talks on MFG.

This workshop will include a poster session; a request for posters will be sent to registered participants in advance of the workshop.

Long Program Schedule

This workshop is part of the long program on "High Dimensional Hamilton-Jacobi PDEs."

- Opening Day: March 9, 2020
- High Dimensional Hamilton-Jacobi PDEs Tutorials: March 10-13, 2020
- Workshop I: High Dimensional Hamilton-Jacobi Methods in Control and Differential Games: March 30-April 3, 2020
- Workshop II: PDE and Inverse Problem Methods in Machine Learning: April 20-24, 2020
- **Workshop III: Mean Field Games and Applications: May 4-8, 2020**
- Workshop IV: Stochastic Analysis Related to Hamilton-Jacobi PDEs: May 18-22, 2020
- Culminating Workshop at Lake Arrowhead: June 7-12, 2020

Participation

Additional information about this workshop including links to register and to apply for funding, can be found on the webpage listed below. Encouraging the careers of women and minority mathematicians and scientists is an important component of IPAM's mission, and we welcome their applications.



Organizers

Diogo Aguiar Gomes (KAUST), Wilfrid Gangbo (UCLA), Ryan Hynd (University of Pennsylvania), and Daniela Tonon (Université de Paris IX Paris – Dauphine).

Speakers

Yves Achdou (Univ. of Paris VII & VI), Clémence Alasseur (Laboratoire de Finance des Marchés de l'Energie), David Ambrose (Drexel), Martino Bardi (Univ. of Padova), Tamer Basar (Univ. of Illinois at Urbana-Champaign), Charles Bertucci (Univ. of Paris IX), Peter Caines (McGill Univ.), Luciano Campi (London School of Economics and Political Science), Elisabetta Carlini (Sapienza Univ. of Rome), René Carmona (Princeton), Philippe Casgrain (Univ. of Toronto), Annalisa Cesaroni (Univ. of Padova), Yat Tin Chow (UC Riverside), Marco Cirant (Univ. of Padova), Pierre Degond (Imperial College), Rita Ferreira (KAUST), Alessandro Goffi (Gran Sasso Science Institute), Ulrich Horst (Humboldt Univ.), Minyi Huang (Carleton), Sebastian Jaimungal (Univ. of Toronto), Daniel Lacker (Columbia), Roland Malhame (École Polytechnique de Montréal), Paola Mannucci (Univ. of Padova), Guilherme Mazanti (Univ. of Orsay), Alpár Mészáros (UCLA), Benjamin Moll (Princeton), Chenchen Mou (UCLA), Levon Nurbekyan (McGill Univ.), Alessio Porretta (Università degli Studi di Roma "Tor Vergata"), Francisco Silva Álvarez (Université de Limoges), Andrzej Swiech (Georgia Institute of Technology), Hamidou Tembine (NYU), Hung Tran (Univ. of Wisconsin-Madison), and Jianfeng Zhang (USC).

