INTERACTION MODELS: MEAN FIELD GAMES, PATTERN FORMATION AND RELATED TOPICS

Padova, January 25-26, 2018

Dipartimento di Matematica "T. Levi-Civita"

The aim of this workshop is bringing together people from different communities, trying to foster new scientific relations.

On the one hand, Mean Field Games theory describes equilibria in games with a large number of rational agents. A research direction in this area is the analysis of qualitative behaviour of equilibria, and the study of interactions between different populations of agents.

On the other hand, in the last twenty years much interest has been devoted to the study of models where a certain number of densities (of mass, population, probability, ...) are subject to laws of diffusion, reaction, and either competitive or cooperative interaction: main examples include systems from population dynamics and nonlinear Schrodinger systems.

Possible connections and analogies between these two classes of problems may lead to a wider perspective and a better understanding of several common phenomena: segregation, concentration, regularity of free boundaries, pattern formation.

Speakers

Pierre Cardaliaguet (Paris-Dauphine) Annalisa Cesaroni (Padova) Alessio Porretta (Roma Tor Vergata) Nicola Soave (Milano Politecnico) Hugo Tavares (Lisboa) Susanna Terracini (Torino) Daniela Tonon (Paris-Dauphine) Francisco Silva (Limoges) Alessandro Zilio (Paris-Diderot)

Organizers: Marco Cirant (Padova), Gianmaria Verzini (Milano Politecnico)

https://events.math.unipd.it/mfg18



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