

Modern Trends in PDE's, Geometric Analysis and Mathematical Physics

5 – 6 September 2011

Day 1 (5 September): PDE's and Geometric Analysis

10:00 – 11:00

[Camillo De Lellis](#) (University of Zürich, Switzerland)

Quantitative rigidity estimates

11:00 – 11:30 Coffee break

11:30 – 12:30

[Eduard Feireisl](#) (Mathematics Institute, Czech Republic)

Singular limits in thermodynamics of viscous fluids

12:30 – 14:30 Lunch

14:30 – 15:30

[Claude Le Bris](#) (École Nationale des Ponts et Chaussées, France)

Some recent progress in deterministic and stochastic homogenization of elliptic PDE's

15:40 – 16:40

[Robert McCann](#) (University of Toronto, Canada)

Geometric Variational Problems in Economics

16:40 – 17:00 Coffee break

17:00 – 18:00

[Terry Lyons](#) (University of Oxford, United Kingdom)

The expected signature of a stochastic process. Some new PDE's

Day 2 (6 September): Mathematical Physics

10:00 – 11:00

[Christian Gérard](#) (University of Paris-XI, France)

Existence and non-existence of ground states in Quantum Field Theory models

11:00 – 11:30 Coffee break

11:30 – 12:30

[Jürg Fröhlich](#) (ETH Zürich, Switzerland)

Friction and diffusion in models of particles interacting with a dispersive medium

12:30 – 14:30 Lunch

14:30 – 15:30

[Jean Bellissard](#) (Georgia Institute of Technology, USA)

Wannier transform for aperiodic solids: preliminary results

15:30 – 16:00 Coffee break

16:00 – 17:00

[Wendelin Werner](#) (ENS d'Ulm, France)

Random surfaces and random geometry