

ERC conference on Optimal Transportation and Applications
Centro De Giorgi, Scuola Normale Superiore
Pisa, October 12-16, 2010

Schedule

Tuesday 12

8.30-8.50. Registration.

8.50-9.00. Welcome address.

9.00-9.50. **Eric Carlen (Rutgers University)**. *Functional inequalities, mass transportation, and asymptotic for the critical mass Keller-Segel model.*

10.00-10.50. **Guillame Carlier (CEREMADE)**. *Matching multi-marginals Monge Kantorovich problem and barycenters in the Wasserstein space.*

10.50-11.30. Coffee break.

11.30-12.20. **Thierry Champion (Toulon)**. *Existence of an optimal transport.*

Lunch.

14.30-15.20. **Aldo Pratelli (Pavia)**. *The duality theorem for rectified cost functions.*

15.30-16.20. **Shin-ichi Ohta (Kyoto University)**. *Non-Contraction of Heat Flow on Minkowski Spaces.*

16.20-16.50. Coffee break.

16.50-17.40. **Filippo Santambrogio (Paris Orsay)**. *Alternative Benamou-Brenier transport problems, with or without convexity.*

17.50-18.40. **Eugene Stepanov (St. Petersburg)**. *Optimal location of industries.*

Wednesday 13

8.30-9.20. **Giuseppe Toscani (Pavia)**. *Kinetic models of Bose-Einstein particles.*

9.30-10.20. **Christian Leonard (Univ. Paris 10)**. *A large deviation approach to optimal transport.*

10.20-10.40. Coffee break.

10.40-11.30. **Guy Bouchitté (Toulon)**. *Smirnov decomposition of transport measures and applications.*

11.40-12.30. **Wilfrid Gangbo (Georgia Tech.)**. *Homogenization in Spaces of Probability Measures.*

Lunch.

14.30-15.20. **Jin Feng (Kansas University)**. *A class of HJB PDE in space of measures and its associated compressible Euler equations.*

15.30-16.20. **Luigi De Pascale (Pisa)**. *Optimal transport problems in some sandpile models.*

16.20-16.50. Coffee break.

16.50-17.40. **Adrian Tudorascu (West Virginia University)**. *A Weak KAM Theorem for the Nonlinear Vlasov System.*

17.50-18.40. **Gershon Wolansky (Technion)**. *Optimal mass transportation and non-imaging optics.*

Thursday 14

8.30-9.20. **Stefano Bianchini (SISSA, Trieste)**. *On the extremality, uniqueness and optimality of transference plans.*

9.30-10.20. **Ludovic Rifford (Nice)**. *Nearly round spheres look convex.*

10.20-10.40. Coffee break.

10.40-11.30. **Jose A. Carrillo (ICREA)**. *Keller-Segel, Fast-Diffusion and Functional Inequalities.*

11.40-12.30. **Michael Westdickenberg (Georgia Tech.)**. *Sticky particle dynamics with interactions.*

Lunch.

Free afternoon

Friday 15

9.00-9.50. **Yann Brenier (Nice)**. *A modified least action principle allowing mass concentrations for the early universe reconstruction problem.*

10.00-10.50. **Augusto Neri (INGV, Pisa)**. *Multiphase transport models of volcanic eruptions.*

10.50-11.30. Coffee break.

11.30-12.20. **Nathael Gozlan (Univ. Paris Est)**. *From concentration of measure to functional inequalities.*

Lunch.

14.30-15.20. **Young-Heon Kim (British Columbia University)**. *Regularity of optimal transportation maps on multiple products of spheres.*

15.30-16.20. **Jiakun Liu (Australian National University)**. *Global regularity of the reflector problem.*

16.20-16.50. Coffee break.

16.50-17.40. **Chloé Jimenez (Univ. Brest)**. *Optimal transport in the quadratic case with a convex constraint: An application of the Champion-De Pascale-Juutinen method.*

17.50-18.40. **Jérôme Bertrand (Toulouse)**. *Prescription of Gauss curvature using optimal mass transport.*

Saturday 16

9.00-9.50. **Nicola Gigli (Nice)**. *The Heat Flow as Gradient Flow*.

10.00-10.50. **Alessio Figalli (Austin)**. *A gradient flow approach to non-local interaction equations*.

10.50-11.30. Coffee break.

11.30-12.20. **Italo Capuzzo Dolcetta (Roma, La Sapienza)**. *A numerical approach to some mean field games problems*.