SUMMER SCHOOL IN MATHEMATICS

OPTIMAL TRANSPORTATION
THEORY AND APPLICATIONS

Institut Fourier – Grenoble (France)
June 15th – July 3rd, 2009

The aim is to present recent developments in optimal transportation and also its applications in biology, mathematical physics, information theory, ...

First week: Basic courses

General theory of optimal transport
Models and applications of optimal transport in economics, traffic and urban planning
Lagrangian systems and their associated costs
Logarithmic Sobolev inequality for diffusions and curvature- dimension condition
Discrete Markov chains, functional inequalities and optimal transport

F. Santambrogio
A. Fathi
I. Gentil
Y. Ollivier

Second week: Advanced courses

Variational methods for incompressible Euler equations
Ricci flow
Gradient flows and optimal transport
Ricci curvature, entropy and optimal transport

A. Figalli
P. Topping
G. Savare
S. I. Ohta

Third week: Workshop


For further information and registration:
Organizers: Y. Ollivier, H. Pajot, C. Villani
Secretary: Geraldine.Rualal@ujf-grenoble.fr

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