

SUMMER SCHOOL IN MATHEMATICS

OPTIMAL TRANSPORTATION
THEORY AND APPLICATIONS

Institut Fourier – Grenoble (France)

June 15th – July 3th, 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

F. Bolley, Y. Brenier, V. Calvez, J. Delon, B. De Meyer, I. Ekeland, U. Frisch, N. Gozlan, R. Gray,
A. Guillin, D. Jacobs, C. Jimenez, A. Joulin, R. McCann, F. Maggi, B. Maury, Q. Mérigot,
B. W. Schachermayer, E. Stepanov, K.T. Sturm, L.Wu.

For further information and registration:

Web site: <http://www-fourier.ujf-grenoble.fr/-2009-.html>

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This school is supported by:

MENRT, CNRS, Université Joseph Fourier (Ecole doctorale MSTII, Collège des Ecoles Doctorales), Ville de Grenoble, Région Rhône-Alpes,
GDR 2753, ANR FOG, ANR CANNON, ANR KAMFAIBLE, ANR EVOL