CURSO DE DOCTORADO

Thierry Champion, Universitè de Toulon, Francia

Introduction to optimal transport theory

In this series of lectures we shall introduce the basic concepts and results of the optimal transport theory, and present some applications and active research topics. We shall mainly focus on the following:

- Monge and Kantorovich transport problems as well as duality in the general setting, cyclic-monotonicity.
- The one dimensional case and monotone transport maps.
- Existence results: Brenier Theorem, the strictly convex case, the norm case and Beckman problem.
- Wasserstein spaces: topology, curves and geodesics. Displacement (or geodesic) convexity and a short introduction to associated gradient flows.

Se pretende realizar en 5 sesiones de una hora y media cada una en el horario indicado, pero habrá flexibilidad de cara a garantizar la asistencia del alumnado.

Organizado por el Departamento de Análisis Matemático
con la colaboración del Instituto de Matemática Interdisciplinar (IMI)

Fecha: 2, 3, 4, 5 y 6 de Febrero de 2015
Hora: A partir de las 11:30 h.
Lugar: Aula 222
Facultad de CC Matemáticas, UCM