

abstract

MINI-COURSE IN GEOMETRIC PDE

Topic:

Speaker:

Affiliation:

Date:

Time/Room:

In these lectures we will describe the relationship between optimal transportation and nonlinear elliptic PDE of Monge-Ampere type, focusing on recent advances in characterizing costs and domains for which the Monge-Kantorovich problem has smooth diffeomorphism solutions.

Background references.

L.C Evans, PDE and Monge-Kantorovich mass transfer. Current developments in Mathematics, 1997. Int. Press, Boston, (1999).

R. T . Rachev and L. Ruschendorf, Mass transportation problems, Springer,1998.

J. Urbas, Mass transfer problems, Lecture Notes, Univ. of Bonn, 1998.

C. Villani, Topics in optimal transportation, Amer. Math. Soc. 2003.