

Mass transportation on sub-Riemannian manifolds

LUDOVIC RIFFORD

Laboratoire J.A. Dieudonn, Universit de Nice - Sophia Antipolis
e-mail: Ludovic.Rifford@math.cnrs.fr

Abstract

We study the optimal transport problem on sub-Riemannian manifolds where the cost function is given by the square of the sub-Riemannian distance. Under appropriate assumptions, we generalize Brenier-McCann's theorem proving existence and uniqueness of the optimal transport map. Several examples will be given. This is a joint work with Alessio Figalli.