1108-49-71   **Marian Bocea*** (`mbocea@luc.edu`), Department of Mathematics & Statistics, Loyola University Chicago, 1032 W. Sheridan Road, Chicago, IL 60660. *Relaxation and Duality for the L^∞ Mass Transport Problem.*

The original mass transport problem, formulated by Gaspard Monge in 1781, asks to find the optimal volume preserving map between two given sets of equal volume, where optimality is measured against a cost functional given by the integral of a cost density. After reviewing some aspects of this classical problem, I will describe recent joint work with E. N. Barron and R. R. Jensen (Loyola University Chicago) leading to a duality theory for the case of relaxed L^∞ cost functionals acting on probability measures with prescribed marginals. (Received December 22, 2014)