
MAXIME JACKY P. LABORDE, Université de Paris

An augmented Lagrangian method for transportation distance with bulk/interface interactions

Recently, Monsaingeon introduced a new optimal transport problem on a closed bounded domain defined via a dynamical Benamou-Brenier formulation. The model handles differently the motion in the interior and on the boundary, and penalizes the transfer of mass between the two. Taking advantage of the dynamical formulation, in this talk we will present a numerical method to compute this problem using an augmented Lagrangian method. This algorithm extends the ALG2 method introduced by Benamou-Brenier to solve the classical optimal transport problem. This is a joint work with Thomas Gallouët and Léonard Monsaingeon.