
ELDAD HABER, UBC

A computational method for the Monge Kantorovich Problem

In this talk we discuss the fluid mechanics interpretation of the optimal mass transport problem. This formulation was proposed by Benamou and Brenier but was considered to be too expensive computationally to be applied for large scale problems. In this talk we show that by using consistent discretization techniques, advanced optimization methods and a multigrid solver we are able to reduce the computational cost of the problem such that it can be efficiently solved using modest computational resources.