A new proof of the Caffarelli contraction theorem

Abstract:

The Caffarelli contraction theorem states that the Brenier optimal transport map sending the Gaussian measure onto a uniformly log-concave probability measure is lipschitz. In this talk, I will present a new proof, using entropic regularization and a variational characterization of lipschitz transport maps due to Gozlan and Juillet. Based on joint work with Nathael Gozlan and Maxime Prod’homme.