

The dual charge method for the multimarginal optimal transport with Coulomb cost

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The multimarginal optimal transport occurs in statistical physics as well as in quantum chemistry, where it is used to describe strongly correlated electrons. In the recent years, efforts have been put into fashioning efficient numerical methods to solve this problem, which is notoriously hard to solve from a computational point of view. In this talk, I will introduce a specific discretisation, owing to the physical interpretation of the Kantorovich dual, to tackle this problem numerically in the case of Coulomb interaction.