Entropy-Transport distances between measures and metric measure spaces

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Abstract

In the first part of the talk we introduce the class of optimal Entropy-Transport problems, a generalization of classical optimal transport where also creation and destruction of mass is taken into account. We focus in particular on the metric properties of these problems, showing how this theory can produce some meaningful distances between nonnegative and finite measures.

Inspired by previous works of Gromov and Sturm, we then use these metrics to construct a new class of distances between unbalanced metric measure spaces.

This talk is based on a joint collaboration with Andrea Mondino.