

Optimal transport, concentration of measure and functional inequalities.

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Abstract: This talk is devoted to Talagrand's transport-entropy inequalities and its deep connections to the concentration of measure phenomenon, large deviation theory and logarithmic Sobolev inequalities. After an introductory part on the field, I will present recent results obtained with P-M Samson and C. Roberto characterizing different functional inequalities in terms of concentration of measure properties.

If time enables, I will also present some works in progress about transport inequalities in a discrete setting.