

On Classical and Quantum Optimal Transport

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In the last 30 years, the theory of Optimal Transportation (OT) has become a diverse tool for exploring applications within and beyond Mathematics, in such diverse fields as Economics, Meteorology, Geometry, Statistics, Fluid mechanics, design problems and Engineering. Nowadays, its generalization to the Non-commutative (Quantum) setting is becoming an active field of research and finds direct applications in Quantum Chemistry and Physics.

In this talk, we will discuss the importance of the theory and move on to the technical details: how to compute OT, its generalization to the quantum data, and which results from classical theory can be translated to the non-commutative case.

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