



Optimal Transport in Cosmology and the Evolution of Large-Scale Structure

February 19 h 10:00 room 1AC150

Abstract: Optimal Transport methods, originally introduced to address very practical problems, have evolved into a rich field of research with applications in several fields, including some unexpected ones like cosmology. Indeed, they have emerged as precious tools in cosmology, providing insights into the formation and evolution of cosmic structures. In these lectures we will review the basic concepts emphasizing the significance of these methods in understanding the build-up of cosmic structures. Notably, there is a meaningful connection between optimal transport methods and Jim Peebles' cosmological least action principle, which will be also reviewed.

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