MOCa 2021: Materia Oscura en Colombia



Contribution ID: 47 Type: not specified

Modeling the Distribution of Galaxies in the Universe with N-body Simulations of Dark Matter

Wednesday 9 June 2021 08:25 (25 minutes)

Large astronomical surveys have allowed us to map the spatial distribution of galaxies on large scales. Measurements of galaxy clustering contain valuable information about cosmology and the physics of galaxy formation, but to extract this information we need accurate models that are based on computationally expensive N-body simulations of dark matter. I will describe our work to measure and model galaxy clustering using these simulations and I will discuss our ongoing efforts to potentially replace expensive simulations with AI techniques.

Author: BERLIND, AndreasPresenter: BERLIND, AndreasSession Classification: MOCa