



ID de la contribución : 341

Tipo : Talk

## Dark Matter distribution in galaxies, and machine learning

*lunes, 3 de noviembre de 2025 17:00 (15)*

I will illustrate the development of new methods, and their results, to determine the dark matter distribution in field galaxies.

Machine learning algorithms trained within the synthetic environment of numerical cosmological simulations -such as the IllustrisTNG- offer the potential to validate and test the reliability of the Dark Matter distribution in such controlled environment, before being applied to real Universe targets.

I will show recent developments in this field commenting on advantages and drawbacks of this innovative methodology.

**Primary author(s) :** IOCCO, Fabio (Università di Napoli "Federico II"); DE LOS RIOS, Martín (IFT-UAM)

**Presenter(s) :** IOCCO, Fabio (Università di Napoli "Federico II")

**Clasificación de la sesión :** COS / DMI

**Clasificación de temáticas :** Cosmology