

Perspective on simulations for future clustering analysis

Thursday 17 July 2025 14:30 (30 minutes)

In this talk, we explore the transformative role of cosmological N-body simulations in advancing our understanding of galaxy clustering. As galaxy surveys become increasingly detailed, the demand for accurate modelling intensifies. We delve into how deep learning acceleration and super resolution simulations offer unprecedented precision and minimize computational costs, paving the way for enhanced clustering analysis. These cutting-edge methodologies promise to revolutionize the modelling and covariance production of large-scale cosmic structures for ongoing and upcoming galaxy surveys.

Author: Dr CARBONE, Carmelita (INAF IASF-MI)

Presenter: Dr CARBONE, Carmelita (INAF IASF-MI)

Session Classification: III day