

Service d'Astrophysique
SÉMINAIRE

Jeudi 10 septembre 11h00

CEA Saclay, Orme des Merisiers Bât 709, p 220 (salle de cours)

**THE FUTURE OF COSMOLOGY WITH GALAXY
CLUSTERS: AN X-RAY PERSPECTIVE**

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INAF - Trieste Astronomical Observatory

The focus of my talk will be on the important role played by galaxy clusters to trace the formation and evolution of cosmic structures. After reviewing the most recent observational studies in the X-ray band, I will critically assess the role played by hydrodynamical simulations to understand the cosmological build-up of clusters. In this context, I will highlight that such simulations provide the ideal tool to capture the interplay between cosmic evolution and small scale complex astrophysical phenomena (e.g., star formation, supernova and AGN feedback). I will finally discuss the perspective offered by wide-field X-ray surveys, as expected from future and planned X-ray telescopes (e.g. eROSITA and WFIT) to reconstruct the growth of cosmic structures and, therefore, to constrain cosmological parameters in a way which is independent of and complementary to tests based on the reconstruction of cosmic expansion.

Le cafe sera servi 10 minutes avant

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