



TOR VERGATA

UNIVERSITÀ DEGLI STUDI DI ROMA

Dipartimento di Fisica

ASTROPHYSICS SEMINAR



Sebastian Grandis

Innsbruck University

Weak lensing calibrated cluster number counts

We will showcase how to find galaxy clusters in X-ray, millimeter, and optical data based on recent results from the South Pole Telescope Collaboration and the eROSITA consortium. We then discuss how weak gravitational lensing allows us to determine the mass scale of the selected clusters, and how the number density of clusters as a function of mass and redshift gives us essential information about the structure of the Cosmos. Our recent analyses show that clusters provide an accurate probe of the cosmological model, complementary and competitive with more established large-scale structure analyses like cosmic shear. We will give a short outlook into upcoming multi-wavelength observing campaigns and their implications for cluster cosmology.

Thursday September 25th 2025 time 12:00 CEST

Join in Aula Grassano (Physics Dept., Tor Vergata University)

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