Galaxy Cluster France Workshop

26 novembre 2026 - 27 novembre 2026

MEUDON

Programme Scientifique

How do clusters build up their dark matter, stellar and gas components across time

Shuowen JIN (IAS), “The Assembly of Massive Galaxies and Protoclusters in the First 2 Gyr”
Felix TORNATORE (LUX), “The ADELINE suite: simulations of massive galaxy clusters in wCDM dark energy models”
Genevieve SOUCAIL (IRAP), “Stellar mass in high redshift clusters: near-IR follow-up of the X-CLASS sample”
Marguerite PIERRE (CEA), “FornaX: le projet XMM Heritage dans le champ profond Euclid EDFF”
Tanguy DUSSERE (IAS), “TBA: Protoclusters in Euclid Q1”

How does the cluster environment transform galaxies? How do we break galaxy formation–cosmology degeneracies?

Fabrizio GENTILE (CEA), “From the Field to the Cluster: The Many Paths of Galaxy Transformation with Euclid”
Aurélie TORTI (UDP-Santiago), “Tracing the galaxy content of a forming cluster: molecular gas and SED modeling in SPT2349-56”
Johan COMPARAT (UGA, LPSC-Grenoble), “Galaxy clusters seen through every galaxy: eROSITA X-ray × Legacy Survey cross-correlations”
Tamara RICHARDSON (DIPC), “SHAMe in Cylinders: Constraining Galaxies to Constrain Cosmology”

How can we use clusters as precision probes of cosmology and fundamental physics, beyond number counts and clustering?

Julien PRISER (OCA), “Measurement of the hydrostatic mass bias in the NIKA2 LPSZ cluster sample at intermediate redshift”
Eleni TSAPRAZI (LUX), “Cosmological tests of gravity with galaxy clusters”
Théo GAYOUX (LUX), “Assessing the cosmological consistency of the most massive galaxy clusters using gap statistics”
Marika LEPORE (CEA), “From X-ray to Weak Lensing: Comparing Cluster Mass Profiles in CHEX-MATE”

What shapes the hot gas in clusters?

Jade PASTÉ (IAS), “Cosmic gas accretion from filaments onto galaxy clusters using the IllustrisTNG simulation”
Edoardo BARALDI (CEA), “CHEX-MATE: A parametric framework for reconstructing the thermodynamic structure of galaxy clusters”
Nicolas CLERC (IRAP), “Galaxy groups and clusters in the NEXUS survey”
Raphaël WICKER (La Sapienza), “Galaxy cluster temperature maps from joint X-ray and tSZ maps with The Three Hundred hydrodynamical simulations”
Théo LEBEAU (KAI-Groningen), “Correcting galaxy cluster hydrostatic mass for non-thermal gas motions”