Colloque national DARK ENERGY - 2ieme édition



ID de Contribution: 60 Type: Non spécifié

The interplay between Dark energy & modified gravity on the amplitude of matter fluctuations discrepancy between CMB and Galaxy Clusters.

In the frame of the dark energy colloquium, we investigate the impact of a dark energy different from fiducial Λ CDM, on a discrepancy on the amplitude of matter fluctuation σ_8 found between local and deep probes. In particular between local, X ray, or near universe, SZ detected cluster counts samples and deep CMB temperature and polarization angular correlation spectrums.

We perform our analysis using MCMC techniques, leaving, along with the relevant dark energy and cosmological parameters, the cluster calibration factor free to vary in a model independent approach.

We then confront the dark energy equation of state parameter w to a modified gravity phenomenological parameter, the growth index γ , in their ability to alleviate the tension. We also show cases were we allow massive neutrinos to vary as well as adding further constraints from other secondary probes like BAO or SNe.

Auteur principal: Dr SAKR, Ziad (IRAP - USJ)

Orateur: Dr SAKR, Ziad (IRAP - USJ)