



ID de Contribution: 28

Type: Oral presentation

Cosmic Shear Nulling: reducing theoretical uncertainties on Dark Energy parameters derived by the Euclid Mission

mercredi 28 février 2024 10:45 (15 minutes)

The Weak Lensing Shear is a powerful probe of cosmology. Along with Galaxy Clustering and the cross-correlation of those two probes, it gives the most effective set of Data, used by cosmological observations, to constrain cosmological parameters and study the large-scale structure of the universe. Yet, the nature of the Dark Energy, representing around 68% of the energy content of our current universe, is still unknown. Thus, any additional cosmological feature, data or probe that would give new constrains or information on cosmological parameters is of interest. One of those features could be the BNT (Bernardeau, Nishimichi, Taruya) transform as it provides a mostly geometrical property of Weak Lensing: The Nulling of the Cross-Spectra. This feature does not depend on the Galaxy Power Spectrum but only on Dark Energy Parameters and brings few additional systematics to the current analysis on Weak Lensing and Galaxy Clustering. As part of the Euclid consortium, we wish to exploit the Nulling property of the BNT transform to reduce theoretical uncertainties on Dark Energy parameters derived by the Euclid Mission.

Astrophysics Field

Cosmology

Day constraints

28 February or 1 March only (i will not be here on the 29 Feb)

Auteur principal: TOUZEAU, David (CEA Saclay/IPhT)

Orateur: TOUZEAU, David (CEA Saclay/IPhT)

Classification de Session: Session 1