ID de Contribution: **72**   Type: **Oral presentation**

Dark Energy Tomography with Euclid

jeudi 24 mars 2022 15:05 (10 minutes)

While the Universe is expanding with increasing velocity, the question of what causes this cosmic acceleration remains unsolved. Acceleration seems to act against gravitational attraction, as if a new source of energy, dubbed dark energy, were responsible for it.

In this presentation I give an introduction to my PhD project, where I will attempt to tackle the question of the nature of dark energy, by probing the possibility of dark energy at different redshifts, or what we refer to here as 'dark energy tomography'. Ultimately, my research aims to contribute to the Euclid mission, by extending the likelihood software to test dark energy at different redshift epochs, contributing to the collaboration effort on comparing theoretical predictions with data and finally investigating different machine learning methods to reconstruct the dark energy contribution in each redshift bin.

Field

Cosmology

Day constaints

Auteurs principaux: GOH, Lisa; KILBINGER, Martin (CEA Saclay/Irfu/DAp); PETTORINO, Valeria (CEA Paris-Saclay, Departement of Astrophysics, CosmoStat Lab)

Orateur: GOH, Lisa

Classification de Session: Talk

Classification de thématique: Astrophysics