IRFU : Institut de recherche sur les lois fondamentales de l'univers

Saclay

DAp/LCS

Cross-correlations between cosmological probes from Euclid, BOSS/e- BOSS, Planck and beyond

Spécialité Astrophysique

Niveau d'étude Bac+5

Formation Master 2

Unité d'accueil DAp/LCS

Candidature avant le 01/02/2020

Durée 6 mois

Poursuite possible en thèse oui

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Autre lien https://www.cosmostat.org/jobs/xc_dap_dphp

Résumé

Le candidat va combiner différentes donnés pour tester des modèles théoriques en cosmologie. Ce sujet pourra évoluer en sujet de thèse.

Sujet détaillé

The thesis will take place within the research group CosmoStat, within the Astrophysics Department (DAp) under the supervision of Valeria Pettorino and Martin Kilbinger, and in collaboration with Vanina Ruhlmann-Kleider from DPhP for the use of BOSS/e-BOSS data.

Mots clés

Compétences

Logiciels

Python, C

Cross-correlations between cosmological probes from Euclid, BOSS/e- BOSS, Planck and beyond

Summary

The candidate will learn how to combine and cross-correlate
different available data (such as real or simulated data for Euclid) to test modified gravity models beyond LCDM. This subject is meant to be developed also in a PhD thesis.

Full description

The thesis will take place within the research group CosmoStat, within the Astrophysics Department (DAp) under the supervision of Valeria Pettorino and Martin Kilbinger, and in collaboration with Vanina Ruhlmann-Kleider from DPhP for the use of BOSS/e-BOSS data.

Keywords

Skills

Softwares

Python, C