ID de Contribution: **7** Type: **Non spécifié**

BAO in the projected cross-correlation of eBOSS DR16 quasars and photometric ELG from the DESI Imaging Surveys

mercredi 20 mai 2020 11:30 (30 minutes)

In this talk, I will present a work I did (publication under collaboration review) where I measured the Baryon Acoustic Oscillations in the projected cross-correlation function binned into transverse comoving radius between the SDSS-IV DR16 eBOSS quasars and a dense photometric sample of emission line galaxies selected from the DESI Legacy Imaging Surveys, which enables to constrain the comoving angular distance, $D_{\rm M}$. In order to mitigate the systematics related to the use of different imaging surveys close to the limit of detection to obtain the required photometric sample, we relied on a neural network approach that accounts for complex dependencies between the imaging attributes and the observed galaxy density. I will present a detailed comparison of the performance between this new observable and the standard auto-correlation function of spectroscopic data for BAO measurements and the cosmological constraints we obtained.

Auteur principal: ZARROUK, Pauline (ICC Durham University)

Orateur: ZARROUK, Pauline (ICC Durham University)

Classification de Session: Workshop Probes