

Contribution ID: 14

Type: not specified

## The cosmic web as a cosmological probe in the Dark Energy Spectroscopic Instrument

Thursday 30 May 2019 11:45 (30 minutes)

Large galaxy redshift surveys have become a standard tool in observational cosmology in the last three decades. The correlation function of the galaxy distribution inferred from those surveys is widely recognized as a strong cosmological probe. This has motivated new surveys such as the Dark Energy Spectroscopic Instrument (DESI) to increase by an order of magnitude the number of mapped galaxies in current catalogs. In this talk I will explain how the cosmic web defined by galaxies in those kind of surveys can serve as cosmological tool complementary to the correlation function, for instance via the Alcock-Paczynski test on the galaxy gradient field derived. I will also show the new beta-skeleton method used to define the cosmic web from galaxy survey data, emphasizing its possibilities as a new cosmological tool that can be applied to data from the DESI.

Author:Mr FORERO-ROMERO, Jaime (Universidad de los Andes)Presenter:Mr FORERO-ROMERO, Jaime (Universidad de los Andes)Session Classification:Cosmology