



Contribution ID : 817

Type : **Oral talk**

Spectroscopic simulations for the Euclid Survey

Thursday, 8 October 2020 11:20 (20)

Euclid is an ESA medium-class mission which will launch a space telescope by the end of 2022 with the aim to perform the largest galaxy survey until now, covering up to one third of the sky and reaching unprecedented precision in probing the Dark sector of the Universe, i.e. Dark Energy and Dark Matter. Euclid will acquire the 2D images of the galaxies' spectra with an instrument called NISP, the Near Infrared Photometer and Spectrometer. Then a spectroscopic data reduction pipeline will extract the 1D spectra from NISP raw frames, with the aim to measure the redshift of the sources. In my work I have used a code to perform detailed simulations of the images that will be acquired by NISP, with the aim to test and validate the spectroscopic data reduction algorithms which will be applied to the true data. In particular I have developed an higher-level wrapper for the simulator, improving the granularity of the simulations, allowing in this way to test in a complete way the data reduction pipeline.

Primary author(s) : Dr. LUCA, Paganin (Università degli Studi di Genova (Italy))

Presenter(s) : Dr. LUCA, Paganin (Università degli Studi di Genova (Italy))

Session Classification : Gravitation and Cosmology

Track Classification : Gravitation and cosmology