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Euclid Mission

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The Esa satellite Euclid will launch in 2020. It will observe 15000deg2 of the darkest sky with his visible imager and his near-IR photometer and spectrograph.

The core science goal of the mission is to measure the evolution of the expansion of the universe up to redshift 2 in order to characterise deviations from the concordance LambdaCDM model, determine the evolution properties of dark energy and test GR.

To do so, Euclid will map the distribution of matter in the universe using 2 main probes: Weak gravitational lensing, measuring the gravitationally induced distortion of the apparent shapes of about one billon of galaxies, and Galaxy Clustering (BAO and RSD), using several tens of million of spectroscopic redshift determinations.

I will present the main objectives of the mission, his forecasted efficiency, and give an update of its current status.

Experimental Collaboration

Euclid consortium

Primary author: Mr BENABED, karim (Institut d'Astrophysique de Paris - CNRS/UPMC)

Presenter: Mr BENABED, karim (Institut d'Astrophysique de Paris - CNRS/UPMC)

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