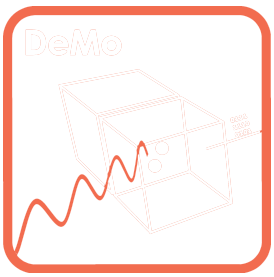

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How we simulate Euclid

Monday 14 June 2021 13:20 (25 minutes)

Euclid is an ESA mission to map the geometry of the Universe and better understand the dark matter and dark energy properties in the universe. The mission will investigate the distance-redshift relationship and the evolution of cosmic structures by measuring shapes and redshifts of galaxies and clusters of galaxies. To explore these two scientific probes, the 1 meter telescope is equipped with two instruments: a wide field imager in the optical (half a square degree), and a spectro-imager in the near infrared. In preparation for survey data after launch, image simulations are used to evaluate the impact of instrument characteristics and support the development of analysis pipelines. In combination with cosmological simulations, they enable an end-to-end performance analysis from an input cosmology to reconstructed cosmological parameters.
We will shortly present the work of the simulation group and then focus on the simulation of the space telescope's two instruments.

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