

Euclid probing Dwarf and Ultra-Diffuse Galaxies: Early Release Observations studies

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Local Universe dwarf galaxies provide constraints for cosmological models (including on the Dark Matter) through their number and their internal structures.

With its exclusive image quality, large field of view, and great LSB sensitivity of its optical and near-infrared cameras, Euclid appears to be a game changer for studying such objects. Indeed, it enables to simultaneously detect the faint dwarf population (including the ultra-diffuse galaxies), their population of globular clusters and their nuclei.

Euclid Early Release Observation fields analysis already allowed us to obtain an unprecedented large sample of dwarfs and GCs in various environments (from field to clusters).

This talk will be made in behalf of the ERO Fornax/Dorado & ERO Perseus teams, and Local Universe Science Working Group.