Mind the gap: A drastic change coming in our view of clusters
brought by Euclid

Abstract
Galaxy clusters are good tracers of the matter density peaks in the
cosmic web. They additionally provide efficient tests for
cosmological models as they form via gravitational collapse in the
expanding Universe. Identification of galaxy clusters from large
extragalactic surveys (e.g., SDSS, ROSAT, Planck, SPT, DeCALS, KIDS,
DES, VHS, LOFAR, ACT, HSC,) has proven to be a powerful way of
detecting new clusters, potentially discovering new strong lenses.
While for nearly 30 years, the Hubble Space Telescope has remained
the field's workhorse for appropriate modelling of individual
clusters, with some renowned observing campaigns dedicated to them
(e.g. LOCUSS, CLASH, Hubble Frontier Fields).
In my presentation, I will discus the upscale brought by Euclid,
opening the statistical Era in cluster cosmology. With the launch
schedule for summer 2023 we are on the verge of a significant
transformation, which should boost the observed number of clusters
to about two orders of magnitude and drastically affect our
approach to cluster analysis. I will attempt to address how the
collaboration is aiming to detect clusters and the first analysis
planed and I will briefly discuss how this affect our way of doing
astronomy as some pixels might never met human eye.