Title: Dwarf Galaxies in the Perseus Cluster
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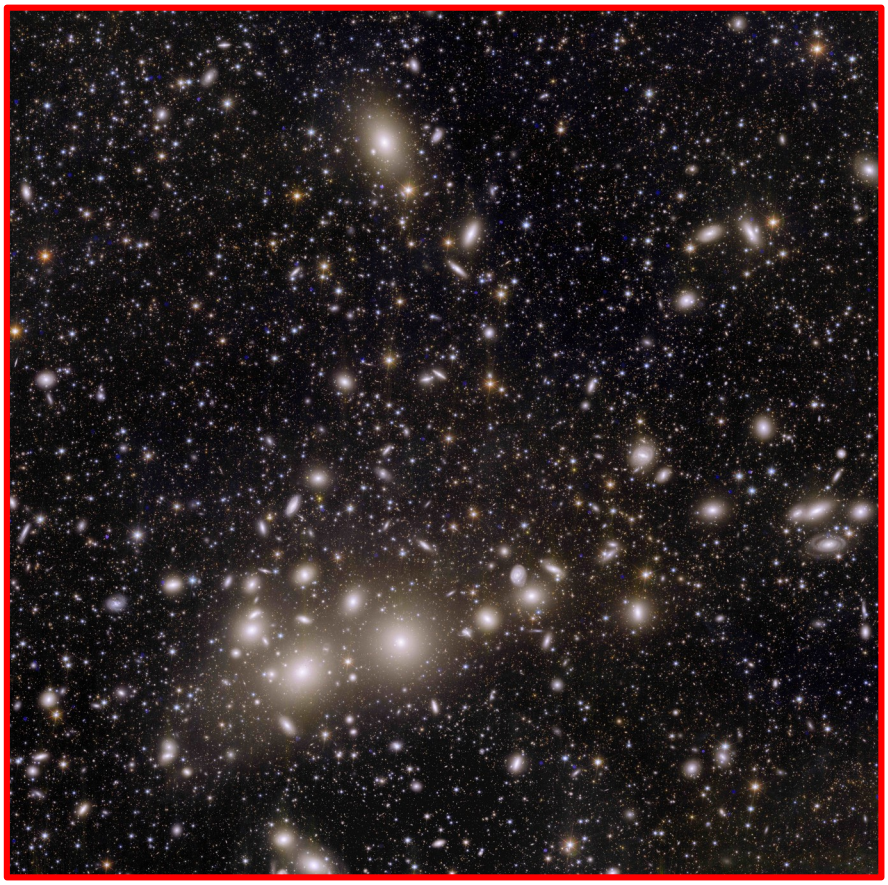

Euclid color image of Perseus Cluster

Description:

The Perseus Cluster is one of the most studied nearby clusters of galaxies at a distance of roughly 73 Mpc. This massive and rich cluster is extremely well-studied and therefore benefits from a large amount of ancillary data covering a wide range of wavelengths. Recently, the Euclid Space Telescope obtained wide-field multi-band observations of this cluster at an unprecedented depth and spatial resolution, as part of the Euclid Early Release observations (EROs). The Euclid observations of Perseus are unique as they allow the *simultaneous* detection and characterization of a large number of cluster galaxies to extremely low surface brightness levels as well as their globular cluster systems.

For this project, the structural and photometric properties of the low surface brightness galaxies in this cluster will be studied. The statistical properties derived for the sample will then be compared to other known dwarf galaxies in the Local Group, other nearby clusters and the field.