

Technical Page

Proposal Type: Regular
 General Category: Astronomy
 Observation Category: Extragalactic
 Total Time Requested: 120 Hours

Proposal Title: Dwarf Ellipticals in Rich Clusters: The First Galaxies or Evolved Spirals

ABSTRACT:

Cluster dwarf ellipticals, the most common type of galaxy in the local universe are excellent candidates for remnants of either the first generation of galaxies, or evolved spirals that fell into clusters near $z = 1$. By investigating the HI content of dEs in the Virgo cluster it is possible to distinguish between these two ideas for their origin. An old primordial population would have little gas, while a difference in HI between the core dEs and those on the outskirts of the cluster would indicate these dEs are evolved spirals. We propose to test these models by obtaining HI masses for dEs in the outer parts of their orbits outside the core, and comparing these to HI masses for the dEs in the core.

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I might want to do remote observing.

Instrument Setup

L-narrow

Atmospheric Optical Instruments:

Special Equipment or setup: none

RFI Considerations

Frequency Ranges Planned