

Technical Page

Proposal Type: Regular
 General Category: Astronomy
 Sub-Category: Spectroscopy
 Observation Category: Extragalactic
 Total Time Requested: 20 Hours

Proposal Title: Low Surface Brightness Galaxies in X-ray Emitting Clusters

ABSTRACT:

Successful surveys for the detection of low surface brightness disk galaxies have been primarily undertaken in spiral rich clusters with little or no X-ray emission. Based on these detections, it has been shown that the number density of galaxies in the local Universe is dominated by galaxies of low surface brightness. This, however, begs the question of whether or not the previously surveyed environments are biased in their preponderance of low surface brightness systems. To test this hypothesis we have undertaken a survey of the spiral-rich, strongly X-ray emitting cluster Abell 1367. As a first step in this project we have optically discovered 36 previously un-identified galaxies in the central region of Abell 1367. However, positive identification of the newly discovered galaxies with the cluster requires knowing the objects' redshifts. To accomplish this, we propose to use the Arecibo 305m telescope to search for these galaxies in HI.

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I want to do remote observing.

Instrument Setup

L-narrow

Atmospheric Optical Instruments:

Special Equipment or setup: none

RFI Considerations

Frequency Ranges Planned

1350-1430

This proposal requires coordination with Punta Salinas radar within the band 1222-1381 MHz..

This proposal requires coordination with GPS L3 at 1381 MHz.