

Technical Page

Proposal Type: Regular
 General Category: Astronomy
 Sub-Category: Spectroscopy
 Observation Category: Extragalactic
 Total Time Requested: 4.0 Hours

Proposal Title: The Effect of Cluster Environment on Galaxy Evolution in the Core Pegasus I Cluster.

ABSTRACT:

The Pegasus cluster offers a most unusual environment in which to study the star formation histories of its members. Several galaxies exhibit signs of HI deficiency, indicative of ongoing ram pressure effects. This is surprising, since Pegasus is considered an environment where ram pressure stripping should not be operating. We have previously obtained HI profiles of 48 galaxies with the Arecibo telescope. Here we propose Arecibo observations of the HI content of 9 more galaxies, to create a complete sample of the spiral galaxies withinin $1 R_A$ in the core Pegasus I cluster. These observations will help clarify how the cluster environment is affecting the evolution of its member galaxies.

Name	Institution	E-mail	Phone	Student
James A. Rose	University of North Carolina at Chapel Hill	jim@physics.unc.edu	919-962-7170	no

Service Observing Request

Remot e Observing Request

- None
- All of the observing run.
- Part of the observing run.
- Queue Observing

- No
- Maybe
- Yes

Instrument Setup

L-narrow

Atmospheric Observation Instruments:

Special Equipment or setup: none

RFI Considerations

Frequency Ranges Planned

1400-1420