

Technical Page

Proposal Type: Short
 General Category: Astronomy
 Sub-Category: Spectroscopy
 Observation Category: Extragalactic
 Total Time Requested: 1 Hours
 Minimum Useful Time:

Proposal Title: A search for HI in Virgo cluster blue early-type dwarf galaxies

ABSTRACT:

We propose to observe with the L-feed receiver of the Arecibo telescope 8 early-type dwarf galaxies in the Virgo cluster, selected after an analysis of the ALFALFA survey data cubes. They appear to be possible HI candidate sources with low S/N (~ 5). Moreover their optical counterparts are characterized by blue centers ($g-i < 0.5$) suggesting the presence of a recent or ongoing star formation activity. Such observations are required to validate our tentative detections. An integration time of 6 minutes per object will allow us to reach a rms of 1.1 mJy (at a resolution of 10 km s^{-1}), roughly two times lower than ALFALFA. The requested observations are not part of the ALFALFA follow-up program.

Name	Institution	E-mail	Phone	Student
Marco Grossi	Osservatorio Astrofisico di Arcetri	grossi@arcetri.astro.it	+390552752234	no

Remote Observing Request

- Observer will travel to AO
- Remote Observing
- In Absentia (instructions to operator)

Instrument Setup

L-wide

Atmospheric Observation Instruments:

Special Equipment or setup: none

RFI Considerations

Frequency Ranges Planned

1395 - 1425

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