

Technical Page

Proposal Type: Regular
 General Category: Astronomy
 Sub-Category: Spectroscopy
 Observation Category: Extragalactic
 Total Time Requested: 56 hours Hours
 Minimum Useful Time: 2 hours

Proposal Title: Harvesting ALFALFA: LBW Followup of Enigmatic ALFALFA sources: III. March 2013 Request

ABSTRACT:

We propose to conduct targeted L-band wide observations of HI candidates without optical counterparts detected by the ALFALFA survey including: (1) high quality ALFALFA detections without optical counterparts and not associated with known tidal debris fields: the "dark galaxy" candidates; and (2) low velocity ($cz < 1000$ km/s), low signal-to-noise, narrow HI line width ALFALFA sources without optical counterparts: the high hydrogen mass to luminosity ratio low mass dwarf galaxy candidates. The objectives of the LBW observations are to confirm the reality of the (almost) "dark" galaxies and possible local extreme dwarf systems so that the most intriguing cases can be targeted for coordinated multiwavelength observations to probe more deeply their dark matter and complete baryon contents. This third installment of our LBW followup campaign focuses on spring targets in newly catalogued areas. The observations will be conducted by members of the Undergraduate ALFALFA team on site.

Name	Institution	E-mail	Phone	Student
Martha P Haynes	Cornell University	haynes@astro.cornell.edu	607/255-0610	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

1340-1430 MHz

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

This proposal requires coordination with GPS L3 at 1381 MHz.