Proposal Identification No.: A2853 Date Received: 2013-Sep-02_13:26:35

Technical Page

This proposal has not been submitted before.

Proposal Type:	Regular
General Category:	Astronomy
Sub-Category:	Spectroscopy
Observation Category:	
Total Time Requested:	122 Hours
Minimum Useful Time:	2

Proposal Title: L-Band Wide Observations of Star-Forming Galaxies in X-ray Selected Groups: The Quenching of Star Formation in the Group Environment

ABSTRACT:

We propose targeted L-band wide observations to measure HI gas content of group galaxies known to be star forming from optical data but which were not detected by the ALFALFA survey. This work is part of a detailed multiwavelength study of a set of nearby groups within 120 Mpc spanning a range of X-ray luminosity, velocity dispersion, and richness. We aim to measure the gas fraction and star formation efficiency of all star forming group members to determine the threshold of gas depletion, star formation quenching, and morphological transformation within intermediate density environments. The proposed LBW observations will provide the critically important gas fractions of star-forming low mass and environmentally gas-depleted group galaxies whose HI fluxes fall below ALFALFA's sensitivity. The observations will be conducted by members of the Undergraduate ALFALFA Team mostly onsite.

Name	Institution	E-mail	Phone	Student
Rebecca A Koopmann	Union College	koopmanr@union.edu	518-388-6786	no

Remote Observing Request

[X] 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

1375-1430

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

This proposal requires coordination with GPS L3 at 1381 MHz.