Proposal Identification No.: A2156 Date Received: 2005-Sep-27_17:52:02

Technical Page

Proposal Type:	Regular
General Category:	Astronomy
Sub-Category:	Spectroscopy
Observation Category:	Extragalactic
Total Time Requested:	27 Hours

Proposal Title: An HI Study of Star-Forming Dwarf Galaxies

ABSTRACT:

We propose an HI study of a unique, complete sample of 26 star-forming dwarf galaxies for which we have unsurpassed multi-wavelength supporting data from visible to mid-infrared wavelengths. Measuring the HI content will add crucial information regarding the fuel reservoir to our existing knowledge of stellar mass and dust content in these systems. Specifically, it will characterize the gas-to-dust and gas-to-stars ratios. In addition, we will use the spectra to measure dynamical masses for the systems in order to better understand the connection between these local, low-mass systems and the infrared-faint Lyman-Break Galaxies detected by the Spitzer Space Telescope (Huang et al. 2005).

Name	Institution	E-mail	Phone	Student
Jessica L Rosenberg	Harvard-Smithsonian Center for Astrophysics	jlrosenberg@cfa.harvard.edu	617-496-7740	no

Service Observing Request

- [X] None
- [ ] All of the observing run.
- [ ] Part of the observing run.
- [ ] Queue Observing

Remot e Observing Request

- [X] No
- [ ] Maybe
- [ ] Yes

Instrument Setup

L-wide

Atmospheric Observation Instruments:

Special Equipment or setup: none

RFI Considerations

Frequency Ranges Planned

1420-1309

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

This proposal requires coordination with GPS L3 at 1381 MHz.