Technical Page

This proposal has not been submitted before.

Proposal Type: Short
General Category: Astronomy
Sub-Category: Spectroscopy

Observation Category:

Total Time Requested: 2.75 Hours

Minimum Useful Time: 1

Proposal Title: Observations of HI in the "smoking gun" galaxy IC 3418 ABSTRACT:

IC 3418 is thought to be undergoing morphological transformation due to ram pressure stripping as it falls into the Virgo Cluster. It has a 17 kpc tail in which $H\alpha$ has been detected and a marginal detection of HI has been made with the VLA, with far less mass than is expected from the optical luminosity of the galaxy. Using Arecibo, we will observe the body and two points on the tail to a much lower column-density limit than was possible with the VLA. This should enable us to easily confirm (or reject) the VLA detection, and make it a strong possibility that we will see more gas both there and in our other pointings than was visible with the VLA.

Name	Institution	E-mail	Phone	Student
Robert F Minchin	Arecibo Observatory	rminchin@naic.edu	7878782612	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

This proposal requires coordination with Punta Salinas radar within the band 1222-1381 MHz. This proposal requires coordination with GPS L3 at 1381 MHz.