

Technical Page

Proposal Type: Regular
 General Category: Astronomy
 Sub-Category: Spectroscopy
 Observation Category: Galactic
 Total Time Requested: 18 Hours
 Minimum Useful Time:

Proposal Title: HI self-absorption and “Diffuse” Carbon recombination lines in the Galaxy
ABSTRACT:

We propose to use the Arecibo Telescope to observe carbon recombination lines (CRLs) near 430 MHz toward directions in the galactic plane where HI self-absorption regions are present. This data will be useful in (a) investigating the association of the CRL emission with self-absorbing cold HI gas, (b) resolving the difference in line-widths between CRLs and the HI self-absorbing features observed earlier in other directions and (c) understanding the physical state of the cold HI regions in the galactic plane.

Name	Institution	E-mail	Phone	Student
Anish Roshi	Raman Research Institute	anish@rri.res.in		no

Remote Observing Request

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

Instrument Setup

430 G

Atmospheric Observation Instruments:

Special Equipment or setup: none

RFI Considerations

Frequency Ranges Planned

430 MHz; Needs RFI coordination