

Technical Page

Proposal Type: Regular
 General Category: Astronomy
 Sub-Category: Spectroscopy
 Observation Category:
 Total Time Requested: 36 Hours

Proposal Title: Mapping HI and OH absorption towards NGC383

ABSTRACT:

We request 36 hours of telescope time to conduct mapping observations at the HI and OH transitions towards the bright continuum region around NGC383 in the Pisces-Perseus Supercluster. These observations will allow a basic morphological analysis of the system, and from the anticipated absorption information, a fully sampled, 2-dimensional map of the thermal characteristics of the system can be calculated. The continuum distribution from this source is indicative of some powerful outflow mechanism, and presents a unique opportunity to fully spatially sample such an object at practical spatial resolutions. These observations will adopt a hexagonal pointing pattern to Nyquist sample the system, and achieve a velocity resolution practical for galactic studies. This experiment will be the first to analyse NGC383 and its environs. The size and sensitivity of the Arecibo telescope makes it the most suitable instrument for this project.

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Service Observing Request

- None
- All of the observing run.
- Part of the observing run.
- Queue Observing

Remote Observing Request

- No
- Maybe
- Yes

Instrument Setup

L-wide

Atmospheric Observation Instruments:

Special Equipment or setup: none

RFI Considerations

Frequency Ranges Planned

1390.0 - 1402.5

1659.8 - 1672.3