

Technical Page

Proposal Type: Commensal
 General Category: Astronomy
 Sub-Category: Spectroscopy
 Observation Category: Extragalactic
 Total Time Requested: 34 Hours

Proposal Title: ALFA HI Survey of the Galactic Plane at $l = 192$ deg: Galaxies in the Zone of Avoidance, Testing the Modified Basketweave Technique

ABSTRACT:

We propose to observe extragalactic HI 21-cm emission with ALFA toward an area around the Galactic plane at $l = 192$ degrees. The region is bounded by $RA = 6 - 7$ hours, $Dec = 13.25 - 26.65$ degrees. The scientific goal is to understand the properties and distribution of HI galaxies in the Zone of Avoidance in this region. The region overlaps with a portion of the Parkes HI Zone of Avoidance survey, so we know of 5 low-latitude galaxies we should certainly recover, at improved resolution. We will be able to compare the ALFA performance with the Parkes results. The technical goal is to investigate the possibility of a commensal survey of the full Galactic plane accessible from Arecibo with a GALFA HI survey of Galactic hydrogen. In particular for this proposal, we are interested in how to handle Decs near 18.5 deg, the terrestrial latitude of the telescope, where the basketweave technique, already successfully used in GALFA precursor runs, must be modified. The other half of this commensal pair of proposals is submitted separately by Korpela et al.

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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

ALFA

Atmospheric Observation Instruments:

Special Equipment or setup: none

RFI Considerations

Frequency Ranges Planned

1325 - 1425