

Technical Page

Proposal Type: Regular
 General Category: Astronomy
 Sub-Category: Spectroscopy
 Observation Category: Extragalactic
 Total Time Requested: 43 Hours

Proposal Title: HI Observations of Gas Poor Galaxies from the Sloan Digital Sky Survey

ABSTRACT:

We propose to make HI observations of 131 optically selected, nearby ($cz < 3000$ km/s) galaxies from the Sloan Digital Sky Survey (SDSS). These objects are all objects that fall within the HI Parkes All Sky Survey (HIPASS) and yet have no detectable HI emission. Many of these galaxies have optical spectra that suggest active star formation is occurring and therefore should have some observable HI. Our proposed plan is to use the Arecibo 305m telescope to improve upon the sensitivity of HIPASS by a factor of ten. This will allow us to probe HI masses ten times smaller than were possible in HIPASS and resolve the apparent issue that there are actively star forming galaxies without detectable HI.

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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-narrow

Atmospheric Observation Instruments:

Special Equipment or setup: none

RFI Considerations

Frequency Ranges Planned

1390-1430