

Technical Page

This proposal has been submitted before.

The previous proposal number is 3069.

Proposal Type: Regular
 General Category: Astronomy
 Sub-Category: Spectroscopy
 Observation Category: Extragalactic
 Total Time Requested: 82.5 (including GALFA-HI) Hours
 Minimum Useful Time: 1.25

Proposal Title: The Arecibo Galaxy Environment Survey - Completing the Local Void

ABSTRACT:

AGES is an HI survey specifically designed to investigate various galactic environments with higher sensitivity than ALFALFA, and also with better spatial and velocity resolution than previous HI surveys. Science goals include: the HI mass function in different environments, the identification of gaseous tidal features and isolated neutral gas clouds, the spatial distribution and properties of HI-selected galaxies, and comparisons with numerical models of galaxy formation. The Local Void is particularly interesting, as simulations predict far more dwarf galaxies than have actually been identified. However, many of these will be low surface-brightness galaxies often missed by optical/near-IR surveys, but found by HI surveys such as AGES. To complete the Local Void field, we request 82.5h in fall 2016 and 120h in spring 2017. On the basis of receiving around 50% of this time allocation, but that we will also be scheduled in spring 2016, we anticipate completion in fall 2017.

Name	Institution	E-mail	Phone	Student
Robert F Minchin	Arecibo Observatory	rminchin@naic.edu	7878782612	no

Remote Observing Request

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

Instrument Setup

ALFA

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.