

Technical Page

This proposal has not been submitted before.

Proposal Type: Large
 General Category: Astronomy
 Observation Category: Extragalactic
 Total Time Requested: 200 Hours
 Minimum Useful Time: 1.25h

Proposal Title: The Widefield Arecibo Virgo Extragalactic Survey –Northern Extension
ABSTRACT:

We propose to extend the Widefield Arecibo Virgo Extragalactic Survey (WAVES) to the northern part of the Virgo cluster. This will enable us to cover a similar area to that already mapped by WAVES and the Arecibo Galaxy Environment Survey (AGES) in the southern part of the cluster, but in a part of Virgo that has not been previously studied to this sensitivity level and which does not have the large sub-clusters present in the south. By comparing these environments, we will learn more about environmental effects on the population of HI sources in Virgo –particularly the optically-dark clouds and tails that are detected in much greater numbers in AGES and WAVES than in shallower surveys. Improved statistics on this population of optically-dark clouds will also allow us to better constrain theories for their formation.

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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: Administrative Comments: This proposal was originally submitted on Wednesday, September 4, 2019 - 23:21 with Confirmation ID 20190904112148 using the new submission form available for Sept 5, 2019 Call. It was resubmitted through the old coversheet form

[<http://www.naic.edu/astro/proposals/aocover-sep19.php>] as an identical copy of original submission for administrative processing purposes.

RFI Considerations

Frequency Ranges Planned

1225 - 1525 MHz (full ALFA range)

1390 - 1420 MHz (most important range for primary science objectives)

This proposal requires coordination with Punta Salinas radar within the band 1222-1381 MHz..

This proposal requires coordination with GPS L3 at 1381 MHz.