

Technical Page

Proposal Type: Commensal
 General Category: Astronomy
 Sub-Category: Spectroscopy
 Observation Category: Extragalactic
 Total Time Requested: 420 with PALFA Hours

Proposal Title: Surveying the Zone of Avoidance with ALFA: Commensal Observations with the PALFA Galactic Plane Pulsar Survey - 2006

ABSTRACT:

We propose to survey the Zone of Avoidance (ZOA) deeply at 21-cm using the ALFA system, mapping hidden galaxies and large-scale structures at low Galactic latitudes. Mapping galaxies in the ZOA is one of four large surveys endorsed by the Extragalactic ALFA consortium, and is the only low-Galactic-latitude project so endorsed. Here, we propose observing commensally with a PALFA low-latitude pulsar survey, with long integration time (almost 300s) per pointing. The PALFA survey has about 5 years to completion, covering $b = \pm 5$ deg, at all available longitudes. We request 420 hours in 2006, in parallel with the PALFA request, to observe commensally with this project, as soon as either the EALFA or PALFA spectrometer becomes available, and commensal observations become possible. (We note the GALFA spectrometer is currently available, but the channel resolution associated with the wideband configuration is too coarse for extragalactic HI work, if meaningful linewidths are to be measured, and galaxies reliably separated from interference.) PALFA will submit a new request each year, and we wish to piggyback for the duration of the project.

Name	Institution	E-mail	Phone	Student
Patricia A Henning	University of New Mexico	henning@as.unm.edu	505-277-3166	no

Service Observing Request

Remote Observing Request

- | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> None
<input type="checkbox"/> All of the observing run.
<input type="checkbox"/> Part of the observing run.
<input type="checkbox"/> Queue Observing | <input type="checkbox"/> No
<input checked="" type="checkbox"/> Maybe
<input type="checkbox"/> Yes |
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Instrument Setup

ALFA

Atmospheric Observation Instruments:

Special Equipment or setup: none

RFI Considerations

Frequency Ranges Planned

1325 - 1425 if using WAPPS

1225 - 1425 when EALFA spectrometer is available

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

This proposal requires coordination with GPS L3 at 1381 MHz.