Proposal Identification No.: A2130

Date Received: 2005-Jun-01 19:43:53

Technical Page

Proposal Type: Large
General Category: Astronomy
Sub-Category: Continuum
Observation Category: Extragalactic
Total Time Requested: 1512 Hours

Proposal Title: The G-ALFA Continuum Transit Survey

ABSTRACT:
As part of the GALFA consortium we propose to use Arecibo and ALFA to carry out a sensitive, high resolution, spectro-polarimetric survey of the Arecibo sky – the GALFA Continuum Transit Survey, GALFACTS. GALFACTS will be a major observational advance in imaging of the polarized radiation from the Milky Way and other galaxies, and promises a transformational advance in our understanding of the magnetic field of the Milky Way, the properties of the magneto-ionic medium, and the role of magnetic fields in galactic processes. We will also explore the polarisation properties of a vast number of extragalactic radio sources down to sub-mJy levels. GALFACTS will be a scientific pathfinder to the Square Kilometre Array in the area of cosmic magnetism, and will not be surpassed until the SKA turns on as survey instrument late in the next decade.

<table>
<thead>
<tr>
<th>Name</th>
<th>Institution</th>
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<tbody>
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<td>no</td>
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</tbody>
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Service Observing Request

- [X] None
- [ ] All of the observing run.
- [ ] Part of the observing run.
- [ ] Queue Observing

Remote Observing Request

- [X] No
- [ ] Maybe
- [ ] Yes

Instrument Setup

ALFA

Atmospheric Observation Instruments:

Special Equipment or setup: P-ALFA/GALFA Continuum spectrometer

RFI Considerations
Frequency Ranges Planned

1225 - 1525

This proposal requires coordination with Punta Salinas radar within the band 1222-1381 MHz.
This proposal requires coordination with GPS L3 at 1381 MHz.