

## 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.

Name	Institution	E-mail	Phone	Student
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**Service Observing Request**

**Remote Observing Request**

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