

Technical Page

This proposal has not been submitted before.

Proposal Type: Urgent
 General Category: Pulsars
 Observation Category: Galactic
 Total Time Requested: 3.00 Hours
 Minimum Useful Time: 3.00 hours

Proposal Title: Accurate polarization calibration using L-wide-receiver pulsar observations
ABSTRACT:

We request 3.00 hours of Arecibo Director’s Discretionary Time to measure the current magnitude of the feed cross-coupling in the L-wide receiver, by observing three bright, highly polarized pulsars. This will allow us to determine the full polarimetric response, which will in turn be used to accurately calibrate the data taken with L-wide receiver. The results will be applied to the study of the geodetic precession in the double neutron star system PSR B2127+11C (observed under project P2910) as well as to other ongoing projects at Arecibo that will greatly benefit from high-precision polarimetry.

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Remote Observing Request

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

Instrument Setup

L-wide

Atmospheric Observation Instruments:

Special Equipment or setup: none

RFI Considerations

Frequency Ranges Planned

This proposal requires Iridium RFI protection at 1612 MHz between 10pm and 6am EST.

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

This proposal requires coordination with GPS L3 at 1381 MHz.