Technical Page

This proposal has not been submitted before.

Proposal Type: Regular
General Category: Pulsars
Observation Category:
Total Time Requested: 34 Hours
Minimum Useful Time: 3 hours

Proposal Title: Pulse-Sequence Polarimetry of Selected Arecibo Pulsars

ABSTRACT:

We propose a further program of sometimes lengthy polarimetric observations on sets of pulsars for which other or shorter observations have been made and found inadequate for useful analysis. The new observations will pursue moding phenomena, supplement our observations of core emission, study nulling and drifting effects, and expand the arena wherein the physical propagation modes can be identified. We will also push our observations and analyses, including microstructure, to faster pulsars, document off-pulse emission and measure new RMs. Given our past success and the unique significance of polarimetric pulse-sequence (PS) measurements made with the Arecibo telescope, we propose a continuing program over the next year to conduct observations of high quality and importance both immediately for the proposers and students as well the pulsar-emission-problem community at large. We request 34 hours during the next cycle of which 35% (12 hours) would be in the 18-21-hour RA region.

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Remote Observing Request

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

Instrument Setup

L-wide 327

Atmospheric Observation Instruments:

Special Equipment or setup: none
RFI Considerations

Frequency Ranges Planned

302-352 MHz
1170-1270 MHz
1320-1620 MHz

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.