

Technical Page

This proposal has not been submitted before.

Proposal Type: Regular
 General Category: Pulsars
 Observation Category:
 Total Time Requested: 32 Hours
 Minimum Useful Time:

Proposal Title: Pulse-Sequence Polarimetry of Selected Arecibo Pulsars

ABSTRACT:

We propose to continue our current programs with new targeted, sometimes lengthy polarimetric observations on selected mostly normal pulsars. The new observations are tailored to complete projects or pursue specific scientific goals. We pursue multi-band polarimetric survey studies, beamform characterizations, moding phenomena, studies of bistability and drifting effects with the aim of developing candidates for simultaneous X-ray/radio campaigns, and expand identification of the physical (X/O) propagation modes. We will observe the slowest pulsar, assess microstructure and intensity dependence, document moding and measure new RMs. Given our past success and the unique significance of Arecibo polarimetric pulse-sequence observations, we propose observations significant both immediately for the authors and their students as well the larger pulsar-emission community. We request 32 hours each during the next two cycles of which 75% (24 hours) would be in the 18-21-hour RA region.

Name	Institution	E-mail	Phone	Student
Joanna M Rankin	University of Vermont	Joanna.Rankin@uvm.edu	802/656-0051	no

Remote Observing Request

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

Instrument Setup

L-wide C 327

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.