

Technical Page

Proposal Type: Regular
 General Category: Pulsars
 Observation Category:
 Total Time Requested: 9 Hours

Proposal Title: NEW SINGLE PULSE OBSERVATIONS OF THREE STRONG PULSARS
ABSTRACT:

We request one transit of three pulsars: PSR 1237+25, PSR 1541+09, and PSR 1133+16, to study single pulses of these objects and collect data on mode switching that these three object exhibit. PSR 1237+25 is a classical mode-switching pulsar, studied by many authors in the past. Our analysis of a short string of data from this pulsar, taken with the Arecibo Telescope after the upgrade is suggesting new information may be obtained about mode switching and nulling, as well as about previously unknown components outside the known pulse window. The two other pulsars exhibit short-term mode switching and we expect to find new details about this phenomenon using high sensitivity and high time resolution data. In all three cases we expect to obtain polarization data for the modes, which may help to locate regions emitting particular modes.

| Name | Institution | E-mail | Phone | Student |
|---------------------|---------------------------|--------------------|---------------------------|---------|
| Leszek A Nowakowski | University of Puerto Rico | leszekan@coqui.net | 787-265-3844 ext. 2025 | no |

I do NOT want to do remote observing.

Instrument Setup

L-wide

Atmospheric Optical Instruments:

Special Equipment or setup: none

RFI Considerations

Frequency Ranges Planned

1350 - 1450

This proposal requires coordination with GPS L3 at 1381 MHz.