Technical Page

Proposal Type:	Regular
General Category:	Pulsars
Observation Category:	Galactic
Total Time Requested:	76 Hours
Minimum Useful Time:	1 hour

Proposal Title: Pulsar Mass Measurements

ABSTRACT:

We plan to use the unique sensitivity of the Arecibo telescope to observe the millisecond pulsar PSR J1640+2224 intensively near superior conjunction, and less intensely during the remainder of the orbit, with the objective of measuring the Shapiro delay for this binary millisecond pulsar. This might confirm the first ever neutron star mass below 1 solar mass. However, even if this is not the case, the planned observations will improve our knowledge of the neutron star mass distribution.

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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

1120-1730

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.