

Technical Page

Proposal Type: Regular
 General Category: Pulsars
 Observation Category:
 Total Time Requested: 50 Hours

Proposal Title: Timing millisecond pulsars. I. The PSR J1738+0335 binary system.

ABSTRACT:

We request 50 hours of telescope time to observe PSR J1738+0335, a binary millisecond pulsar with a short 8.5-hour orbital period and a 0.09 M_{\odot} companion recently found in a mid-galactic latitude survey with the Parkes radiotelescope. Owing to the pulsar's small flux density (1 mJy) it has been impossible to find a timing solution so far at Parkes. With its large collecting surface, the Arecibo radiotelescope can improve the timing precision of this object by several orders of magnitude. The potential benefits of precise timing of this object are to be investigated.

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Service Observing Request

- None
- All of the observing run.
- Part of the observing run.
- Queue Observing

Remote Observing Request

- No
- Maybe
- Yes

Instrument Setup

430 G L-narrow S-low

Atmospheric Observation Instruments:

Special Equipment or setup: 430 MHz: either PSPM or the CBR Other: either the WAPP or the ABPP

RFI Considerations

Frequency Ranges Planned

426-434
1385-1485

This proposal requires coordination with AFTWF within the band 425-435 MHz.