

Technical Page

Proposal Type: Regular
 General Category: Pulsars
 Observation Category: Galactic
 Total Time Requested: 27 Hours

Proposal Title: High-Precision Timing of Binary and Millisecond Pulsars

ABSTRACT:

We request observations once a month in the LST range 17:45 – 20:00, for a total of 27 hours over one year, to continue timing three millisecond pulsars discovered in the Parkes Multibeam Pulsar Survey and to obtain new data on a previously known millisecond pulsar. The data from these observations will form an important high-precision contribution to the pulsar timing array project. We will also obtain good proper motions for these objects, which will lead to a better understanding of the millisecond pulsar velocity distribution, and potentially to constraints on the orbital geometries and component masses. which will lead to a better understanding of the millisecond pulsar velocity distribution, and potentially to constraints on the orbital geometries and component masses.

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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

L-wide

Atmospheric Observation Instruments:

Description of Observer Equipment: We will use the WAPPs and ASP.

Special Equipment or setup: none

RFI Considerations

Frequency Ranges Planned

This proposal requires coordination with Punta Salinas radar within the band 1222-1381 MHz..

This proposal requires coordination with GPS L3 at 1381 MHz.