Technical Page

Proposal Type: Regular
General Category: Pulsars
Observation Category: Galactic
Total Time Requested: 2.5 Hours
Minimum Useful Time: 2.5 hr

Proposal Title: A Global Campaign for Precision Timing of a Millisecond Pulsar

ABSTRACT:
We request a single 3-hour session on PSR J1713+0747, the most precisely timed millisecond pulsar, that will serve as the cornerstone for a 24-hr international campaign involving telescopes in North America, Europe, and Australia. The purpose of this campaign is to understand the different contributions to the timing error budget, to perform a detailed study of scintillation properties, pulse jitter, and pulse profile evolution with frequency, and to determine timing offsets between the different telescopes. These goals are all crucial to the International Pulsar Timing Array effort and to shortening the time to detection of gravitational waves using pulsar timing.

<table>
<thead>
<tr>
<th>Name</th>
<th>Institution</th>
<th>E-mail</th>
<th>Phone</th>
<th>Student</th>
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<tbody>
<tr>
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<td>no</td>
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</tbody>
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Remote Observing Request

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

Instrument Setup

L-wide

Atmospheric Observation Instruments:

Special Equipment or setup: PUPPI = primary pulsar backend

RFI Considerations

Frequency Ranges Planned

1150 - 1730
This proposal requires coordination with Punta Salinas radar within the band 1222-1381 MHz.

This proposal requires coordination with GPS L3 at 1381 MHz.