Technical Page

This proposal has not been submitted before.

Proposal Type: Regular
General Category: Pulsars
Sub-Category: Continuum
Observation Category: Galactic
Total Time Requested: 4.5 Hours
Minimum Useful Time: 60

Proposal Title: Long-term Timing of the Relativistic Binary Pulsar PSR B1534+12

ABSTRACT:
Pulsars in relativistic binary systems have provided the most rigorous tests of gravitation in strong fields to date. PSR B15334+12 continues to be a valuable high-precision laboratory for gravitational physics and pulsar astronomy. The PUPPI backend provides even greater opportunities for substantial improvements in relativistic-parameter precision, high-precision measurement of relativistic spin precession, and additional pulsar astrophysics as described below. We request six 90-minute epochs (approximately LST 1430-1600) over the course of the next observing year, in order to track relativistic effects in this binary system as well as changes in pulse-dispersion properties over time.

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<thead>
<tr>
<th>Name</th>
<th>Institution</th>
<th>E-mail</th>
<th>Phone</th>
<th>Student</th>
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<tbody>
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Remote Observing Request

☐ Observer will travel to AO
X Remote Observing
☐ In Absentia (instructions to operator)

Instrument Setup

430 G L-wide

Atmospheric Observation Instruments:

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.