This proposal has not been submitted before.

Proposal Type: Regular
General Category: Pulsars
Observation Category: Galactic
Total Time Requested: 52.75 Hours
Minimum Useful Time: 90 minutes

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, and PSR B1534+12 continues to be a valuable high-precision laboratory for gravitational physics. The PUPPI backend provides even greater opportunities for substantial improvements in relativistic-parameter precision, significant measurement of relativistic spin precession, and additional pulsar astrophysics as described below. We request 1) six 90-minute epochs (approximately LST 1430-1600) over the course of the next observing year, and 2) a campaign of 14 consecutive observing days (LST 1345-1700) plus one track (LST 1800-2045) of the polarization calibrator PSR B1929+10, preferably to be scheduled between July and August 2015.

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<tr>
<th>Name</th>
<th>Institution</th>
<th>E-mail</th>
<th>Phone</th>
<th>Student</th>
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<tbody>
<tr>
<td>Emmanuel Fonseca</td>
<td>The University of British Columbia</td>
<td>efonse</td>
<td>604-218-5426</td>
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Remote Observing Request

☐ Observer will travel to AO
☒ 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

422 - 442 MHz
1150 - 1730 MHz

This proposal requires coordination with Punta Salinas radar within the band 1222-1381 MHz.
This proposal requires coordination with GPS L3 at 1381 MHz.