

## Technical Page

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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### 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.