

## 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 B1534+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.

Name	Institution	E-mail	Phone	Student
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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

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

This proposal requires coordination with GPS L3 at 1381 MHz.