

Technical Page

Proposal Type: Regular
 General Category: Pulsars
 Observation Category: Galactic
 Total Time Requested: 38.75 Hours

Proposal Title: PSR B1534+12: Intensive Timing and Monitoring Geodetic Precession
ABSTRACT:

We request a session of 12 consecutive observing days, from 1400 to 1700 LST, for observations of the binary pulsar B1534+12 at 430 and 1400 MHz. We also request 2.75 extra calibration hours during this period: 45 min. from 1315 to 1400 LST, and twice one hour from 1900 to 2000 LST. Our principal scientific goals are to obtain high quality profiles as part of a series with which we are monitoring and beginning to quantify the long-term general-relativistic geodetic precession, and to acquire a further set of timing data with good orbital coverage, providing a valuable complement to the long-term timing data and allowing us to refine the relativistic orbital timing parameters.

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I do NOT want to do remote observing.

Instrument Setup

430 CH receiver L-narrow

Atmospheric Optical Instruments:

Description of Observer Equipment: Princeton Mark IV pulsar observing system.

Special Equipment or setup: We will also use the WAPP and Mark III and anticipate running the PSPM in parallel.

RFI Considerations

Frequency Ranges Planned

425-435
 1370-1470

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

This proposal requires coordination with GPS L3 at 1381 MHz.

This proposal requires coordination with AFTWF within the band 425-435 MHz.