

Technical Page

Proposal Type: Regular
 General Category: Pulsars
 Observation Category:
 Total Time Requested: 98 Hours

Proposal Title: Coherent Timing Observations of PSRs B1534+12 and B1855+09

ABSTRACT:

We request a session of 14 observing days, from 1330 to 2030 LST, for observations of the binary pulsars B1534+12 and B1855+09 at both 430 MHz and 1.4 GHz. Data will be acquired and analyzed with the new Princeton "Mark IV" system. Our principal scientific goals include fundamental tests of gravitation theory, improvement of the estimate of the distance to PSR B1534+12 (and hence the double neutron star binary inspiral rate), and better limits on the mass of PSR B1855+09, which will test models of millisecond pulsar formation and evolution.

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Service Observing Request

- None
- All of the observing run.
- Part of the observing run.
- Queue Observing

Remote Observing Request

- No
- Maybe
- Yes

Instrument Setup

L-band 430 MHz CH receiver

Atmospheric Observation Instruments:

Description of Observer Equipment: Princeton Mark IV

Special Equipment or setup: Special setup: none Software needs: none Media needs: we will supply DLT tapes

RFI Considerations

Frequency Ranges Planned

see proposal