Proposal Identification No.: P2277
Date Received: 2006-Sep-28 15:33:19

Technical Page

Proposal Type: Regular
General Category: Pulsars
Observation Category: Galactic
Total Time Requested: 24 Hours
Minimum Useful Time: 60 mins

Proposal Title: High-recision timing of a double neutron star system

ABSTRACT:
We request 24 hours over a 12-month baseline to continue regular timing observations of a relativistic binary pulsar system, J1829+2456. Our timing observations so far determined a minimum companion mass of 1.22 Mrun which makes it likely that the companion is a neutron star. Continued timing of J1829+2456 will measure the proper motion and provide further constraints on the time dilation/gravitational redshift parameter, gamma. These will provide vital constraints on the system geometry, birth spin period of J1829+2456 and the kick produced during the supernova.

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<thead>
<tr>
<th>Name</th>
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<th>Phone</th>
<th>Student</th>
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<tbody>
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Remote Observing Request

- Observer will travel to AO
- X Remote Observing
- In Absentia (instructions to operator)

Instrument Setup

L-wide 327

Atmospheric Observation Instruments:

Special Equipment or setup: none

RFI Considerations

Frequency Ranges Planned
This proposal requires coordination with GPS L3 at 1381 MHz.