

Technical Page

Proposal Type: Regular
 General Category: Pulsars
 Sub-Category: Continuum
 Observation Category: Galactic
 Total Time Requested: 50 Hours

Proposal Title: Timing Newly Discovered Millisecond Pulsars

ABSTRACT:

In Arcio proposal P1436, we were awarded 1.4-GHz pulsar search observations toward 10 globular clusters. These observations were carried out in June 2001 using the WAPP instrument. Using our newly constructed Beowulf cluster at McGill University, we are pleased to report that we have discovered 3 new globular cluster millisecond pulsars, two in M13 and one in M5. Here we request Arecibo observations to begin timing these three sources, in order to determine precise spin, astrometric, and for 2 of the 3, binary orbital parameters. We request a total of 50hr of observations at 1.4GHz this term, scheduled in an initial 10-day intensive observing session, and approximately bi-weekly thereafter. We will make use of WAPP as well as one or more other pulsar backends recording simultaneously.

Name	Institution	E-mail	Phone	Student
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Service Observing Request

Remote Observing Request

- | | |
|---|--|
| <input checked="" type="checkbox"/> None
<input type="checkbox"/> All of the observing run.
<input type="checkbox"/> Part of the observing run.
<input type="checkbox"/> Queue Observing | <input type="checkbox"/> No
<input checked="" type="checkbox"/> Maybe
<input type="checkbox"/> Yes |
|---|--|

Instrument Setup

L-wide

Atmospheric Observation Instruments:

Special Equipment or setup: none

RFI Considerations

Frequency Ranges Planned

1150 - 1300

1350 - 1550

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

This proposal requires coordination with GPS L3 at 1381 MHz.