Technical Page

Proposal Title: TIMING NEWLY DISCOVERED MILLISECOND PULSARS IV

ABSTRACT:

In Arecibo proposal P1436, we were awarded 1.4 GHz pulsar search observations of 10 globular clusters (GCs). We made these observations in June 2001 using the WAPP instrument and subsequently discovered 7 new millisecond pulsars (MSPs) in the data. In project P1640 we were awarded time to begin timing 3 of these new pulsars in the clusters M13 and M5. In this proposal, we request an additional year of monthly 1 hour observations of these clusters in order to continue timing 5 of the millisecond pulsars contained therein. The availability of 4 WAPPs will allow us to obtain better detections of the currently known pulsars and will also improve our chances of detecting new pulsars in these clusters, which may “scintillate up”. With 1 hour on each cluster plus 15 minutes for setup at each epoch, the total time request is 27 hours for the next year.

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<thead>
<tr>
<th>Name</th>
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Service Observing Request

- [X] None
- [ ] All of the observing run.
- [ ] Part of the observing run.
- [ ] Queue Observing

Remote Observing Request

- [ ] No
- [ ] Maybe
- [X] Yes

Instrument Setup

L-wide

Atmospheric Observation Instruments:

Special Equipment or setup: none

RFI Considerations
Frequency Ranges Planned

1125 - 1525

This proposal requires coordination with Punta Salinas radar within the band 1222-1381 MHz.
This proposal requires coordination with GPS L3 at 1381 MHz.