

Technical Page

Proposal Type: Long Term
 General Category: Pulsars
 Observation Category:
 Total Time Requested: 16 Hours

Proposal Title: Timing Observations of Pulsars in Globular Clusters

ABSTRACT:

We propose to perform long-term timing of the 14 known Globular Cluster pulsars visible from Arecibo. Utilizing state-of-the-art filterbank and baseband technologies it will be possible to precisely measure neutron star masses in the two relativistic binary systems. In addition, the internal structure of the host clusters may be probed via precise pulsar timing positions combined with the measurement of cluster and nearby star gravitational accelerations.

| Name | Institution | E-mail | Phone | Student |
|----------------------|------------------------------------|-----------------------|---------------|---------|
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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

430 MHz CH receiver

Atmospheric Observation Instruments:

Description of Observer Equipment: 10 MHz baseband recording system based on a custom

Special Equipment or setup: Special setup: Software needs: Media needs:

RFI Considerations

Frequency Ranges Planned

see proposal