

Technical Page

Proposal Type: Long-term
 General Category: Pulsars
 Observation Category:
 Total Time Requested: 105 Hours

Proposal Title: High precision timing of pulsars in globular clusters

ABSTRACT:

We request 105 hours of Arecibo radio telescope time to carry out the first year of L-band timing observations of the pulsars in the globular clusters visible at Arecibo, using the ABPP as the prime timing backend. The higher signal-to-noise ratios expected at L-band, combined with the high time resolution provided by the ABPP, should increase the timing precision of these pulsars by one order of magnitude. This will allow the determination of proper motions, significantly improve measurements of post-Keplerian parameters for some of the binary systems, improve previous studies of the dynamics of these globular clusters and, finally, contribute to the searching effort presently scheduled at Arecibo.

Name	Institution	E-mail	Phone	Student
Paulo C Freire	Arecibo Observatory	pfreire@naic.edu	Ext. 358	

I do NOT want to do remote observing.

Instrument Setup

430 G L-wide

Atmospheric Optical Instruments:

Special Equipment or setup: none

RFI Considerations

Frequency Ranges Planned