

## Technical Page

Proposal Type: Regular  
 General Category: Pulsars  
 Observation Category:  
 Total Time Requested: 108 Hours

**Proposal Title:** Shapiro Delay and Millisecond Pulsar Masses

**ABSTRACT:**

We request 108 hrs of Arecibo time for high-precision timing observations of the binary millisecond pulsars PSRs B1855+09 and J1713+0747, particularly near superior conjunction. The goal is to improve the measured Shapiro delay in these systems, and hence improve the measurements of the masses of all components. We will observe at 430 and 1400 MHz using the PSPM and BACSPIN pulsar backends, which are ideally suited to this project.

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**Service Observing Request**

**Remote Observing Request**

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

430 MHz Gregorian                      L-band 430 MHz CH receiver

**Atmospheric Observation Instruments:**

**Description of Observer Equipment:** PSPM, BACSPIN

**Special Equipment or setup:** Special setup: Software needs: Media needs: DLT tapes, we will supply

**RFI Considerations**

**Frequency Ranges Planned**

see proposal