

### Technical Page

Proposal Type: Regular  
 General Category: Pulsars  
 Observation Category: Galactic  
 Total Time Requested: 40 Hours

**Proposal Title:** PSRJ1453+19 — another pulsar planetary system?

*ABSTRACT:*

We request 40-hr to resolve the unusual timing behaviour of the 5.7-ms pulsar J1453+19, one of a dozen pulsars discovered in a drift-scan survey during the Arecibo upgrade. Unlike the other new pulsars from this search, we have so far not been able to obtain a phase-coherent timing solution for J1453+19. We show that this is almost certainly due to the presence of at least one Jupiter-mass companion. Continued timing observations, including two weeks of daily observations, are necessary to determine the nature of this pulsar’s companion(s). If confirmed, this will be only the third pulsar planetary system.

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**Service Observing Request**

**Remote Observing Request**

- None
- All of the observing run.
- Part of the observing run.
- Queue Observing

- No
- Maybe
- Yes

**Instrument Setup**

430 G                      L-wide                      327

**Atmospheric Observation Instruments:**

**Special Equipment or setup:** none

**RFI Considerations**

**Frequency Ranges Planned**