

## Technical Page

Proposal Type: Regular  
 General Category: Pulsars  
 Observation Category:  
 Total Time Requested: 12 Hours

**Proposal Title:** Giant Pulses from J1752+2359

*ABSTRACT:*

Recently the pulsar J1752+2359 was found to be among the small group of pulsars which emit occasional "giant pulses", which are much stronger than the average pulse or the typical single pulse. This group of pulsars (which includes the Crab Nebula pulsar) offers a unique opportunity to study the emission physics of pulsars via high time resolution observations. The availability of this second "slow" pulsar for study with high time resolution is invaluable to our ongoing program to distinguish between theoretical models of pulsar emission. We propose a set of observations of J1752+2359 at 327, 1425, and 2650 MHz at high time resolution to extend our previous work by comparing the temporal behavior of this pulsar with our micro- and nanostructure measurements of the Crab giant pulses.

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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**

L-wide                  S-low                  327

**Atmospheric Observation Instruments:**

**Description of Observer Equipment:** We will use the data acquisition systems we have built and installed at the Observatory.

**Special Equipment or setup:** none

**RFI Considerations**

**Frequency Ranges Planned**

312-342 MHz

1395-1455 MHz

2400-2900 MHz (approx)