

## Technical Page

Proposal Type: Regular  
 General Category: Pulsars  
 Observation Category:  
 Total Time Requested: 24 Hours

**Proposal Title:** Ultra-High Time Resolution Measurements of the Crab Giant Radio Pulses: Phase 2 – Subnanosecond Structure.

**ABSTRACT:**

We propose to continue our investigation of giant pulses from the Crab pulsar. We intend to measure these pulses at 0.5 ns resolution to compare the observed structure with the results of detailed theoretical modeling of the radio emission mechanism.

Name	Institution	E-mail	Phone	Student
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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**

C X-high

**Atmospheric Observation Instruments:**

**Description of Observer Equipment:** We will use the New Mexico Tech voltage recording system currently installed at Arecibo Observatory.

**Special Equipment or setup:** The limited bandwidth of the fiber optic IF system requires an auxiliary set of mixers. Refer to the scientific justification for more details.

**RFI Considerations**

## **Frequency Ranges Planned**

4000-6000; 8000-10000