

### Technical Page

Proposal Type: Regular  
 General Category: Pulsars  
 Observation Category: Galactic  
 Total Time Requested: 15 Hours

**Proposal Title:** Polarimetry and single-pulse studies of enigmatic new pulsar J0815+09

**ABSTRACT:**

We request 15 hr of observing time to carry out detailed polarimetric and single-pulse observations of a most unusual pulsar J0815+09, recently confirmed in our on-going Arecibo drift-scan survey. This pulsar has a unique pulse profile which challenges accepted models of pulsar emission. It also displays intriguing subpulse drifting and single pulse behavior. The proposed observations, which span the frequency range 0.3—8 GHz, will provide a number of emission parameters necessary to characterize the emission properties of J0815+09.

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**

430 G      610      L-wide 430 CH receiver      L-narrow S-band receiver      S-low C X-high 327

**Atmospheric Observation Instruments:**

**Special Equipment or setup:** Computer support for mounting disk drives.

**RFI Considerations**

**Frequency Ranges Planned**

300-350  
420-440  
600-620  
1000-2000  
2000-3000  
3000-4000  
4000-5000  
7500-8500

This proposal requires Iridium RFI protection at 1612 MHz between 10pm and 6am EST.

This proposal requires coordination with Punta Salinas radar within the band 1222-1381 MHz..

This proposal requires coordination with GPS L3 at 1381 MHz.

This proposal requires coordination with AFTWF within the band 425-435 MHz.