

## Technical Page

Proposal Type: Regular  
 General Category: Pulsars  
 Sub-Category: Continuum  
 Observation Category: Galactic  
 Total Time Requested: 54 Hours

**Proposal Title:** A Complete 1.4-GHz Search for Pulsars in Globular Clusters Using WAPP  
**ABSTRACT:**

In June 2001 we obtained 1.4-GHz Arecibo pulsar search data toward 10 globular clusters using the WAPP instrument. Using our newly constructed Beowulf cluster at McGill University, we have completed analysis of 5 of these clusters and are delighted to report that we have discovered 3 new millisecond pulsars, two in M13 and one in M5. A proposal to commence timing observations of these sources is being submitted separately. Greatly encouraged by these results, and in anticipation of completing the analysis of all observed clusters by summer 2002, we now propose to complete a 1.4-GHz survey of all Arecibo-visible globular clusters within 50kpc of the Sun. We therefore request 54hr of Arecibo time spread over 14 days using the L-wide receiver in order to observe an additional 12 clusters.

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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

### Atmospheric Observation Instruments:

**Special Equipment or setup:** none

### RFI Considerations

### Frequency Ranges Planned

1350-1550

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

This proposal requires coordination with GPS L3 at 1381 MHz.