

Technical Page

Proposal Type: Regular
 General Category: Pulsars
 Sub-Category: Continuum
 Observation Category: Galactic
 Total Time Requested: 3 Hours

Proposal Title: Confirmation of Pulsars with Possible EGRET Associations

ABSTRACT:

We are conducting a survey of 54 unidentified high-energy EGRET gamma-ray sources to search for radio pulsations with the Parkes Multibeam system. The multibeam system allows us to make comparatively long integrations (35 min) while still achieving good coverage of the large EGRET error boxes. In particular, we are searching a population of EGRET sources whose distribution is consistent with the Galactic Halo and the Gould Belt, as opposed to other populations of EGRET sources, whose distribution is either isotropic (suggesting an extra-Galactic source) or along the Galactic Plane. Analysis of these observations is approximately halfway complete and we have a number of interesting pulsar candidates. As some of these candidates are also visible from Arecibo, we request confirmation observations of three candidates with the Arecibo telescope, whose much smaller beam size at L-band would also greatly constrain the position of any confirmed pulsar.

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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

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

This proposal requires coordination with GPS L3 at 1381 MHz.