

Technical Page

Proposal Type: Regular
 General Category: Pulsars
 Observation Category: Galactic
 Total Time Requested: 12.0 Hours
 Minimum Useful Time: 2 hours

Proposal Title: Mapping Pulsar Emission Regions Using Interstellar Scintillation

ABSTRACT:

Locating the pulsar radio emission region is a necessary component to understand the pulsar emission mechanism and coherent emission processes in general. Studies of pulsar emission regions are difficult, as they are very small and cannot be resolved using any conventional techniques. However, multi-path scattering in the interstellar medium provides effective interferometric baselines of sufficient length to probe deep within the pulsar magnetosphere and map this region. We have recently used interstellar scintillation to map the emission regions of pulsar B0834+06. To continue this program, we ask for 12 hours of observation time to follow up our previous targets and locate and map the emission regions of four additional pulsars amenable to this study.

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Remote Observing Request

- Observer will travel to AO
- Remote Observing
- In Absentia (instructions to operator)

Instrument Setup

327

Atmospheric Observation Instruments:

Special Equipment or setup: none

RFI Considerations

Frequency Ranges Planned

