

Technical Page

Proposal Type: Regular
 General Category: Pulsars
 Observation Category: Galactic
 Total Time Requested: 32.5 Hours
 Minimum Useful Time: 0.5

Proposal Title: Exploring Pulsars Discovered by PALFA

ABSTRACT:

We will time pulsars discovered in ALFA surveys. For newly discovered pulsars, without established timing solutions, these observations will determine their spin-down rates, from which their ages and magnetic field strengths can be derived; they will measure their positions with sub-arcsecond resolution, revealing associations between the pulsars and supernova remnants, X-ray and gamma-ray sources; and they will allow detection of binary companions, should any be present. For young, energetic pulsars, these observations will provide contemporaneous rotation ephemerides to search for X-ray and gamma-ray emission, they will allow us to study the pulsars' timing noise and single pulse properties, and they will allow us to detect rotational glitches. Timing observations are a crucial part of the study of these pulsars and are absolutely necessary to accomplish the goals of the pulsar ALFA surveys.

Name	Institution	E-mail	Phone	Student
David J Nice	Bryn Mawr College	dnice@brynmawr.edu	610-526-5361	no

Remote Observing Request

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

Instrument Setup

L-wide

Atmospheric Observation Instruments:

Special Equipment or setup: none

RFI Considerations

Frequency Ranges Planned

1120-1620