

Technical Page

Proposal Type: Director Discretionary Time
 General Category: Pulsars
 Observation Category:
 Total Time Requested: 2 Hours
 Minimum Useful Time: 1.5 hours

Proposal Title: Additional scintillation observations of two non-millisecond pulsars

ABSTRACT:

Understanding, characterizing, and correcting for interstellar time delay is vital to the success of Pulsar Timing Array (PTA) efforts, including that of the NANOGrav collaboration for which the Arecibo Observatory is a central instrument. We observed three pulsars at 430 MHz in January 2011 in order to assess their scintillation characteristics. We want to follow up on two of those pulsars (B0823+26 and B0834+06, also at 430 MHz) in order to monitor time variability of the scintillation pattern, from which we can determine the average scattering delay. We will use the Mock spectrometers with high frequency resolution in order to be sensitive to extreme delay events. Several Oberlin College undergraduates will participate in the observations.

Name	Institution	E-mail	Phone	Student
Dan Stinebring	Oberlin College	dan.stinebring@oberlin.edu	440-775-8331	no

Remote Observing Request

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

Instrument Setup

430 G

Atmospheric Observation Instruments:

Special Equipment or setup: none

RFI Considerations

Frequency Ranges Planned