

Technical Page

Proposal Type: Regular
 General Category: Pulsars
 Observation Category: Galactic
 Total Time Requested: 36 Hours
 Minimum Useful Time: 1

Proposal Title: Studying Apparent Faster-than-light Pulse Propagation at the HI Resonance Using PSR B1937+21

ABSTRACT:

We propose observations to confirm the discovery of apparent faster-than-light pulse propagation first detected using the Arecibo radio telescope last year. This phenomenon, while previously recognized in the optics community, has yet to be applied to astronomical observations. Doing so allows us to study the properties of HI in a way not previously possible. These new observations will improve on the previous measurement by both increasing the total integration time, and removing quantization artifacts through the use of the ASP backend.

Name	Institution	E-mail	Phone	Student
Fredrick A Jenet	University of Texas at Brownsville	fredrickajenet@gmail.com	(626)524-0518	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