

Technical Page

This proposal has not been submitted before.

Proposal Type: Director Discretionary Time
 General Category: Pulsars
 Observation Category: Extragalactic
 Total Time Requested: 20 Hours
 Minimum Useful Time: 1 hour

Proposal Title: An Arecibo Search for Repeats from an UTMOST Fast Radio Burst
ABSTRACT:

We request Director’s Discretionary Time in order to use Arecibo to search for repeat bursts from FRB 160410. This Fast Radio Burst (FRB) was recently found with the upgraded Molongolo telescope and is one of only a handful of FRBs visible to Arecibo. The proposed observations are sensitive to repeat bursts with 100x less fluence than the original FRB 160410 burst. Such a detection would establish the second-only repeating FRB source (crucial for understanding their physical nature) and, importantly, would localize the source to approximately a 10 arcsecond by 3 arcminute region (thereby greatly facilitating association with a host galaxy).

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Remote Observing Request

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

Instrument Setup

ALFA

Atmospheric Observation Instruments:

Special Equipment or setup: none

RFI Considerations

Frequency Ranges Planned

1200 - 1550

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

This proposal requires coordination with GPS L3 at 1381 MHz.