

Technical Page

This proposal has not been submitted before.

Proposal Type: Regular
 General Category: Pulsars
 Observation Category: Extragalactic
 Total Time Requested: 50 Hours
 Minimum Useful Time: 1 hour

Proposal Title: Deeper Investigation of FRB Candidates in the PALFA Survey

ABSTRACT:

Fast radio bursts (FRBs) are a puzzling class of short-duration (milliseconds) radio bursts, coming from extraGalactic, and possibly cosmological distances. Since the first discovery in 2017, we only know of 24 FRBs, while the all sky rate of FRBs is about 3000 per sky per day. Only one out of the 24 FRBs is known to repeat. Here, we request 50 hours of observing time for deeper search for repeat bursts from the 6 best candidate FRBs found by the PALFA survey. Finding even one more repeating FRB will be a tremendous advance in our understanding of the FRB population.

Name	Institution	E-mail	Phone	Student
Chitrang Patel	McGill University	chitrang.patel@mail.mcgill.ca	5142137045	no

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

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

This proposal requires coordination with GPS L3 at 1381 MHz.