This proposal has not been submitted before.

Proposal Type: Regular
General Category: Pulsars
Observation Category: Extragalactic
Total Time Requested: 15.75 Hours
Minimum Useful Time: 2.25 hrs

Proposal Title: The search for repeating radio flashes from FRB candidates in the PALFA Survey.

ABSTRACT:
Arecibo was the first telescope after Parkes to report the discovery of a Fast Radio Burst (FRB), (Spitler et al., 2014). Very recently, Spitler et al., 2016 reported 10 additional bursts from the same FRB making it the first repeating FRB. With the help of a new single pulse pipeline we have identified and picked out our 10 best FRB candidates from the outer Galaxy observations of the PALFA survey. Now that we know that FRBs can repeat, we would like to target these sources for follow-up observations since finding even one more repeating FRB will help us test models for the apparent FRB sky distributions and determining the origins of FRBs. We ask for 10 hours of observation time for one of the targets, J0621+14, and 2 hours each on the other 9 candidates, to be taken by the L-wide receiver with the PUPPI instrument. In addition we ask for 15 minutes of set up time before each observation. This amounts to a total telescope time of 31.5 hrs.

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<tr>
<th>Name</th>
<th>Institution</th>
<th>E-mail</th>
<th>Phone</th>
<th>Student</th>
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<tbody>
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Remote Observing Request

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

Instrument Setup

L-wide

Atmospheric Observation Instruments:

Special Equipment or setup: none

RFI Considerations
Frequency Ranges Planned

1150 - 1730

This proposal requires Iridium RFI protection at 1612 MHz between 10pm and 6am EST.
This proposal requires coordination with Punta Salinas radar within the band 1222-1381 MHz.
This proposal requires coordination with GPS L3 at 1381 MHz.