Technical Page

Proposal Identification No.: A1729

Proposal Type: Regular
General Category: Astronomy
Observation Category: 14 Hours

Proposal Title: Dual Station Observations Aimed at Developing RFI Mitigation Procedures

ABSTRACT:

We propose a modest request for time to use the Arecibo Telescope and the GBT in simultaneous observations aimed at diagnosing RFI and using the expected uncorrelated RFI between the two sites to excise RFI from several generic kinds of measurements. These include (1) identification of individual ‘giant’ pulses from the Crab pulsar; (2) a search for giant pulses from M33, the nearest, large galaxy in Arecibo’s declination range; and (3) HI emission from weak galaxies in bands heavily contaminated by RFI at Arecibo. Our aim is to develop techniques for identification of single, dispersed pulses; to potentially confirm giant pulses from M33 possibly seen from Arecibo; and to develop RFI excision methods for spectroscopy. Our work is motivated both scientifically and as demonstrator observations and analysis for both the LOFAR and the SKA projects.

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<tr>
<th>Name</th>
<th>Institution</th>
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<th>Phone</th>
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<tbody>
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Service Observing Request

- [X] None
- [ ] All of the observing run.
- [ ] Part of the observing run.
- [ ] Queue Observing

Remote Observing Request

- [ ] No
- [X] Maybe
- [ ] Yes

Instrument Setup

430 G L-wide

Atmospheric Observation Instruments:

Special Equipment or setup: none

RFI Considerations

Frequency Ranges Planned