Technical Page

Proposal Type: Regular
General Category: Pulsars
Observation Category: 76 Hours

Proposal Title: Exploring Pulsar Magnetospheric Dynamics via Nulling, Moding and Drifting

ABSTRACT:

New insights have been gained in recent years through the study of pulsar drifting and nulling. Under proposals P1639 and P1734 the Arecibo sky has been surveyed for pulsars exhibiting especially interesting pulse-modulation phenomena—i.e. nulling, drifting, moding and their interactions. Studies of pulsar B0943+10 and B0809+74 have been especially insightful—and continue to be—and many questions now turn on how other pulsars do and do not resemble these stars both physically and observationally. We request time to conduct follow-up observations pursuant to the above programs. Generally, we made short exploratory observations of many pulsars under the above two programs. Here we request time to observe those fewer pulsars discovered to exhibit physically interesting phenomena for longer periods on a given day as well as to make needed additional observations on crucial well known stars (e.g., B0943+10).

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<thead>
<tr>
<th>Name</th>
<th>Institution</th>
<th>E-mail</th>
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<th>Student</th>
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<tbody>
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Service Observing Request

Remote Observing Request

None

All of the observing run.

Part of the observing run.

Queue Observing

X

No

Maybe

Yes

Instrument Setup

610 L-wide 327

Atmospheric Observation Instruments:

Special Equipment or setup: This is a simple program instrumentally. It would require only one WAPP at the lower frequencies, and four WAPPs to cover the L-wide passband. The observations would be either archived or moved on to our UVM raid array which is resident at AO, monster0.
RFI Considerations

Frequency Ranges Planned