Technical Page

Proposal Type: Regular
General Category: Planetary Radar
Observation Category: Solar System
Total Time Requested: 118 Hours
Minimum Useful Time: 2 Hours

Proposal Title: Arecibo Radar Imaging of Nine Near-Earth Asteroids During September 2010-February 2011

ABSTRACT:

We plan to observe nine near-Earth asteroids with the Arecibo S-band planetary radar system to continue our very successful program of characterizing the near-Earth asteroid population. Our goals include detailed physical characterization, determination of binarity or multiplicity, orbital refinement, and shape modeling depending on the quality of the data obtained. A better understanding of the near-Earth asteroid population is necessary to assess impact hazards with Earth and constraining models of the formation and evolution of the solar system.

<table>
<thead>
<tr>
<th>Name</th>
<th>Institution</th>
<th>E-mail</th>
<th>Phone</th>
<th>Student</th>
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<tbody>
<tr>
<td>Patrick A Taylor</td>
<td>Arecibo Observatory</td>
<td><a href="mailto:ptaylor@naic.edu">ptaylor@naic.edu</a></td>
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<td>no</td>
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Remote Observing Request

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

Instrument Setup

- S-Band radar
- S-band receiver

Atmospheric Observation Instruments:

Special Equipment or setup: none

RFI Considerations

Frequency Ranges Planned