This proposal has not been submitted before.

Proposal Type: Urgent
General Category: Planetary Radar
Sub-Category: Radar
Observation Category: Solar System
Total Time Requested: 3 Hours
Minimum Useful Time: 1

Proposal Title: Radar Observations of Newly Discovered Near-Earth Object 2018 XG5

ABSTRACT:
We request one 3.5-hour observing track (including transmitter warm-up time) on May 2nd to observe the recently discovered near-Earth object (NEO) 2018 XG5, during its closest approach at a distance of 0.067 au. NEOs are high priorities of the NASA funded Planetary Radar Science group at the Arecibo Observatory (AO), and each year about 40 to 60 newly discovered NEOs are observed using the planetary radar system at AO. Usually not much is known about recently discovered NEOs, except for their orbital parameters. Radar observations allow to refine its orbit, helping us not to lose the object. In addition, radar also allows us to estimate its size, rotation state, and surface properties.

<table>
<thead>
<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

[X] 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