Technical Page

This proposal has not been submitted before.

Proposal Type:	Urgent
General Category:	Planetary Radar
Observation Category:	Solar System
Total Time Requested:	1.75 Hours
Minimum Useful Time:	1.0

Proposal Title: Radar Observations of Small Near-Earth Asteroid 2014 UR

ABSTRACT:

We request one 1.75-hour observing track, October 19 from 00:00 to 01:45 AST, to detect near-Earth asteroid 2014 UR. This asteroid is an NHATS object of interest to NASA as a possible future robotic or crewed mission target. It was detected in October 2014 with Arecibo and found to have a rapid rotation period of roughly 5 minutes. New observations will refine its orbit further (improving the prediction of its Earth encounter in 2016), confirm its rapid rotation, and better estimate the size of the asteroid, which is suggested to be 15 to 30 meters in diameter.

Name	Institution	E-mail	Phone	Student
Patrick A Taylor	Arecibo Observatory	ptaylor@naic.edu	787-878-2612 x358	no

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