

Technical Page

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 hour

Proposal Title: Radar Observations of Potentially Hazardous Asteroid 2018 EJ4

ABSTRACT:

We request one 3-hour observing track (including transmitter warm-up time) to observe the recently discovered near-Earth asteroid 2018 EJ4, which is roughly 200 meters in diameter. EJ4 is large enough (and close enough) to be classified as potentially hazardous. Even with just 250 kW of transmitter power, the SNR per run for EJ4 should be greater than 100. These observations will allow us to refine its orbit, and also to estimate its size, rotation state, and surface properties. We are requesting to take all of the time that is currently assigned to P1693 (two hours on Tuesday June 5, 22:00 AST to midnight). We also would like the transmitter to be warmed up starting at about 21:00 AST, if that can be done without disrupting the scheduled C-band observations (P3169), so that we will be able to observe right at 22:00.

Name	Institution	E-mail	Phone	Student
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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