

Technical Page

Proposal Type: Regular
 General Category: Planetary Radar
 Observation Category: Solar System
 Total Time Requested: 91.75 Hours

Proposal Title: Radar Imaging of Seven Near-Earth Asteroids in January-April 2005

ABSTRACT:

We propose delay-Doppler radar imaging, physical modeling, satellite searches, and orbit refinement of near-Earth asteroids (NEAs) 7889 (1994 LX), 22753 (1998 WT), 30825 (1990 TG1), 1999 HF1, 1999 RR28, 2004 QT24, and 2004 RF84 during January-April 2005. We seek to improve constraints on the orbital parameters, mass, and bulk density of binary object 1999 HF1, which may be the largest known NEA binary. Two of the targets may be close to 4 km in diameter; four are very strong kilometer-sized objects; and one has a basaltic composition. Six of the objects will be detected by radar for the first time and four are classified as "Potentially Hazardous" by the Minor Planet Center.

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Service Observing Request

Remote Observing Request

- None
- All of the observing run.
- Part of the observing run.
- Queue Observing

- No
- Maybe
- Yes

Instrument Setup

S-Band radar

Atmospheric Observation Instruments:

Special Equipment or setup: none

RFI Considerations

Frequency Ranges Planned