

### Technical Page

Proposal Type: Urgent  
 General Category: Planetary Radar  
 Observation Category: Solar System  
 Total Time Requested: 25 Hours  
 Minimum Useful Time:

**Proposal Title:** Urgent Proposal for S-band Radar Imaging of Near-Earth Asteroid 2008 BT18 in July 2008

*ABSTRACT:*

We propose delay-Doppler radar imaging, physical modeling, satellite searches, and orbit refinement of near-Earth asteroid 2008 BT18 during its very close approach within 0.015 AU (6 lunar distances), when it will be an extremely strong imaging target. With an absolute magnitude  $H = 18.3$ , 2008 BT18 is probably within a factor of two of 700 meters in diameter, so 7.5-m delay-Doppler images could place thousands of pixels on the object and reveal considerable surface detail.

Name	Institution	E-mail	Phone	Student
Lance A. M. Benner	Jet Propulsion Laboratory	lance.benner@jpl.nasa.gov	818-354-7412	no

#### Remote Observing Request

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

#### Instrument Setup

S-Band radar

#### Atmospheric Observation Instruments:

**Special Equipment or setup:** none

#### RFI Considerations

#### Frequency Ranges Planned