

Technical Page

Proposal Type: Regular
General Category: Planetary Radar
Observation Category: Solar System
Total Time Requested: 65 Hours

Proposal Title: Radar Observations of Asteroids 1 Ceres and 2 Pallas

ABSTRACT:

We propose to observe the main-belt asteroids 1 Ceres and 2 Pallas, in order to measure rotationally-resolved surface properties and obtain delay-Doppler images of Ceres. These measurements will address the relationship between the objects' collisional history and surface processing, and determine the degree of (in)homogeneity in surface properties. The upgraded Arecibo radar can, for the first time, obtain rotationally-resolved measurements at sufficient S/N to be statistically significant.

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Instrument Setup

S-Band radar S-band receiver

Atmospheric Optical Instruments:

Special Equipment or setup: none

RFI Considerations

Frequency Ranges Planned