Proposal Identification No.: R1886 Date Received: 2004-Oct-01_14:08:23

Technical Page

Proposal Type:	Regular
General Category:	Planetary Radar
Sub-Category:	Radar
Observation Category:	Solar System
Total Time Requested:	28 Hours

Proposal Title: Radar Observations of Mercury during the Spring 2004 Conjunction

ABSTRACT:

The primary objective of these observations is to make high-resolution radar images of the putative ice deposits at Mercury's south pole. These will be the first Arecibo radar observations of the south pole since 1992 and our first opportunity to look at this pole with the upgraded S-band radar system. In addition to the S-band observations, we will also use Arecibo as the receiving station for bistatic X-band observations with the Goldstone X-band transmitter. This will provide us with near-simultaneous dual-wavelength data on the south polar ice and other bright radar features.

Name	Institution	E-mail	Phone	Student
John K Harmon	Arecibo Observatory	harmon@naic.edu	787-878-2612	no

Service Observing Request

- [X] None
- [ ] All of the observing run.
- [ ] Part of the observing run.
- [ ] Queue Observing

Remot e Observing Request

- [X] No
- [ ] Maybe
- [ ] Yes

Instrument Setup

S-Band radar S-band receiver X-high

Atmospheric Observation Instruments:

Special Equipment or setup: none

RFI Considerations

Frequency Ranges Planned

2380
8500 - 8620