

## Technical Page

Proposal Type: Regular  
 General Category: Astronomy  
 Sub-Category: Spectroscopy  
 Observation Category: Galactic  
 Total Time Requested: 45 hours Hours

**Proposal Title:** High-latitude OH/IR star color mimics

*ABSTRACT:*

About 75% of  $|b| > 10$  deg circumstellar shells, color-selected from the IRAS Point Source Catalog as potential OH/IR stars, do not exhibit 1612 MHz masers. Many of these OH/IR star color "mimics" are O-rich Mira variables: their existence has for 10 years highlighted a serious gap in our understanding of shells, which my new transient shell paradigm resolves. This needs testing. It predicts that about 1.6 high-latitude mimics in the Arecibo sky become OH/IR stars per decade. This proposal aims to check that prediction.

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### Instrument Setup

L-wide

### Atmospheric Optical Instruments:

**Special Equipment or setup:** none

### RFI Considerations

### Frequency Ranges Planned

1612-1668 MHz