

Technical Page

Proposal Type: Long-term
 General Category: Astronomy
 Sub-Category: Spectroscopy
 Observation Category: Galactic
 Total Time Requested: 12 Hours

Proposal Title: V1511 Cyg: the prototype for newly born OH/IR stars

ABSTRACT:

About 75% of color-selected, $|b| > 10^\circ$, circumstellar shells do not exhibit 1612 MHz masers. Many of these OH/IR star color "mimics" are O-rich Miras, whose existence has for 10 years highlighted a serious gap in our understanding of shells. Now, in V1511 Cyg, we have a prototype for demonstrating that many mimics should be regarded as the immediate precursors of OH/IR stars. This proposal is aimed at confirming this status for V1511 Cyg, by securely defining its OH properties around a complete (600 d) pulsation cycle.

| Name | Institution | E-mail | Phone | Student |
|--------------|---------------------|-----------------|--------------|---------|
| Murray Lewis | Arecibo Observatory | blewis@naic.edu | 787 878 2612 | no |

I NA want to do remote observing.

Instrument Setup

L-wide

Atmospheric Optical Instruments:

Special Equipment or setup: none

RFI Considerations**Frequency Ranges Planned**

1600 to 1670 MHz