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.

<table>
<thead>
<tr>
<th>Name</th>
<th>Institution</th>
<th>E-mail</th>
<th>Phone</th>
<th>Student</th>
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</thead>
<tbody>
<tr>
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<td>no</td>
</tr>
</tbody>
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Instrument Setup

L-wide

Atmospheric Optical Instruments:

Special Equipment or setup: none

RFI Considerations

Frequency Ranges Planned

1612-1668 MHz