

Technical Page

Proposal Type: Urgent
 General Category: Astronomy
 Sub-Category: Spectroscopy
 Observation Category: Extragalactic
 Total Time Requested: 4.17 Hours

Proposal Title: Urgent Update for A2119 (OH Megamasers in ULIRGs: The Mega-Obvious Place to Look for Zeeman Splitting!)

ABSTRACT:

This winter under program a2119 we observed six OH megamasers for circular polarization with the idea of measuring magnetic fields. We were spectacularly successful, finding strong polarization in four of the six sources sampled. One of these is a Gigamaser, which happens to have a particularly clear Zeeman-splitting pattern that corresponds to a magnetic field of 18 milliGauss. Unfortunately, we are faced with an ambiguity in SIGN of the magnetic fields because we couldn't determine the sense of circular polarization. Practically speaking, this is best accomplished by observing a known Galactic OH maser and some ancillary calibration observations. We propose to make these calibration observations. We classify this proposal as 'urgent' because we need to submit our discovery paper announcing the results soon.

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Service Observing Request

Remote Observing Request

- | | |
|---|--|
| <input checked="" type="checkbox"/> None
<input type="checkbox"/> All of the observing run.
<input type="checkbox"/> Part of the observing run.
<input type="checkbox"/> Queue Observing | <input type="checkbox"/> No
<input type="checkbox"/> Maybe
<input checked="" type="checkbox"/> Yes |
|---|--|

Instrument Setup

L-wide

Atmospheric Observation Instruments:

Special Equipment or setup: interim correlator

RFI Considerations

Frequency Ranges Planned

1637 - 1667