Proposal Identification No.: A2195 Date Received: 2006-Feb-01_13:15:25

Technical Page

Proposal Type:	Regular
General Category:	Astronomy
Sub-Category:	Spectroscopy
Observation Category:	Extragalactic
Total Time Requested:	30 Hours

Proposal Title: A Search for OH/IR stars in M33

ABSTRACT:

Multi-epoch Spitzer observations of the whole of M33 allow us to select for the brightest variable sources at 3.5 microns with a variabilty amplitude appropriate for a luminous OH/IR star. We propose to observe the 9 brightest sources from regions with Solar metallicity in the hope of detecting their 1612 MHz emission. At this point the only known extra-galactic OH/IR stars are nine in the LMC. One of the benefits of detecting OH/IR stars in M33 is its accurate distance, which will allow definitive physical parameters to be obtained for objects with Solar metallicity, something that has not been possible for Galactic objects with any precision.

Name	Institution	E-mail	Phone	Student
Terry J Jones	Dept. Astronomy, University of Minnesota	tjj@astro.umn.edu	612 624 8009	no

Service Observing Request

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

Remot e Observing Request

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

Instrument Setup

L-wide

Atmospheric Observation Instruments:

Special Equipment or setup: none

RFI Considerations

Frequency Ranges Planned

This proposal requires Iridium RFI protection at 1612 MHz between 10pm and 6am EST.