

Technical Page

This proposal has not been submitted before.

Proposal Type: Regular
 General Category: Astronomy
 Sub-Category: Spectroscopy
 Observation Category: Galactic
 Total Time Requested: 30 Hours
 Minimum Useful Time: one hour

Proposal Title: A Study of the Excitation Temperature of the CH 3335 MHz Line

ABSTRACT:

The CH 3335 MHz line has always been considered one of the most sensitive tracers of low-density, diffuse molecular gas. However, in deriving the physically relevant quantity, $N(\text{CH})$, assumptions about the excitation temperature must be made. Our previous project showed that these assumptions may not be warranted, but our sample size (three lines of sight) was small. We wish to extend our study to 24 lines of sight so that we may ascertain whether the excitation temperature must be determined separately in order to obtain accurate values of $N(\text{CH})$.

Name	Institution	E-mail	Phone	Student
Loris Magnani	University of Georgia	loris@physast.uga.edu	706-5422876	no

Remote Observing Request

- Observer will travel to AO
- Remote Observing
- In Absentia (instructions to operator)

Instrument Setup

S-high

Atmospheric Observation Instruments:

Special Equipment or setup: none

RFI Considerations

Frequency Ranges Planned