

Technical Page

Proposal Type: Regular
 General Category: Astronomy
 Sub-Category: Spectroscopy
 Observation Category: Galactic
 Total Time Requested: 21 Hours

Proposal Title: The Distribution of H₂CO in the Far Outer Galaxy

ABSTRACT:

We propose to observe 9 giant molecular clouds in the Far Outer Galaxy (galactocentric distances >16 kpc) in the 4.83 GHz transition of H₂CO. We have detected the 141 GHz line of H₂CO in these objects and we want to use the Arecibo observations to constrain the density and abundance of this species in the very different molecular environment of the Outer Galaxy. In addition, the implications of determining the H₂CO abundance for the new interdisciplinary field of astrobiology are discussed.

Name	Institution	E-mail	Phone	Student
Loris Magnani	University of Georgia	loris@physast.uga.edu	706-542-2876	no

Service Observing Request

- None
- All of the observing run.
- Part of the observing run.
- Queue Observing

Remote Observing Request

- No
- Maybe
- Yes

Instrument Setup

C

Atmospheric Observation Instruments:

Special Equipment or setup: none

RFI Considerations

Frequency Ranges Planned