

Technical Page

Proposal Type: Regular
 General Category: Astronomy
 Observation Category: Extragalactic
 Total Time Requested: 36 Hours
 Minimum Useful Time: 1 hours

Proposal Title: Centimeter HCN absorption lines toward local gas rich galaxies

ABSTRACT:

We propose to observe centimeter HCN l-type absorption lines (J=4 and J=6) toward seven local gas rich galaxies, to study temperature and column density of dense molecular gas in these galaxies. It will be the first time to make such a survey of these lines toward local gas rich galaxies with strong radio continuum emission. These lines are ideal tools especially for detecting dense gas in larger distance and better than using millimeter lines of HCN or HNC. This survey can also be a good start for studying dense molecular gas in galaxies with red-shift larger than 0.1.

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Remote Observing Request

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

Instrument Setup

C X-high

Atmospheric Observation Instruments:

Spectrophotometer

Special Equipment or setup: none

RFI Considerations

Frequency Ranges Planned