

## Technical Page

Proposal Type: Regular  
 General Category: Astronomy  
 Sub-Category: Spectroscopy  
 Observation Category: Galactic  
 Total Time Requested: 12 Hours

**Proposal Title:** Finishing Mapping Dark Clouds with HI Narrow Line Absorption

**ABSTRACT:**

We proposal to extend our HI narrow line absorption and OH maps of four dark clouds. Combined with data from other instruments (CO, C18O, 13CO, and CI), our recent Arecibo HI survey of dark clouds proves conclusively the association of HINLA and molecular clouds. The spatial extent is critical in assessing the volume density of cold HI, and thus differentiating different H2 formation models. Due to the large angular size of selected sources, we ask for more time to complete mapping dark clouds in HINLA.

Name	Institution	E-mail	Phone	Student
Di Li	Cornell University and NAIC	dl42@cornell.edu	607 2554759	G

**Service Observing Request**

**Remote Observing Request**

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

**Instrument Setup**

L-wide

**Atmospheric Observation Instruments:**

**Special Equipment or setup:** none

**RFI Considerations**

**Frequency Ranges Planned**