

## Technical Page

Proposal Type: Regular  
 General Category: Astronomy  
 Sub-Category: Spectroscopy  
 Observation Category: Galactic  
 Total Time Requested: 21.5 Hours  
 Minimum Useful Time: 2 hours

**Proposal Title:** THE ZEEMAN EFFECT IN CH

*ABSTRACT:*

We take advantage of the newly-cleared band near 720 MHz to re-do a previous attempt (Arecibo proposal A1522, observed May/June 2001) to measure the Zeeman effect in the 700 MHz lines of CH, which samples regions with volume densities 10e6 per cc. A1522 failed because of interference, which should now be gone thanks to digital TV. We also will perform a survey for the CH line in about 12 sources.

Name	Institution	E-mail	Phone	Student
Carl Heiles	university of califor- nia at berkeley	heiles@astro.berkeley.edu	510 642 4510	no

### Remote Observing Request

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

### Instrument Setup

705-825

### Atmospheric Observation Instruments:

**Special Equipment or setup:** none

### RFI Considerations

### Frequency Ranges Planned

700 - 725