

## Technical Page

Proposal Type:           Urgent  
 General Category:       Astronomy  
 Sub-Category:           Spectroscopy  
 Observation Category:   Solar System  
 Total Time Requested:   20 Hours

**Proposal Title:** OH Spectroscopy of Comet 2001 A2 (LINEAR)

*ABSTRACT:*

Comet 2001 A2 (LINEAR) passes within .25 AU of the Earth in July, 2001. We propose to perform OH spectroscopy of the maser lines at 1612 MHz and 1665/1667 MHz in order to measure the gas production rate and constrain the degree of collisional quenching of the OH maser. These observations will be similar to those of Comet C/1999 S4 in the summer of 2000 and C/1999 T1 to be performed in late April 2001. Radar observations are also planned, and will be coordinated for maximum scientific return of the two projects.

Name	Institution	E-mail	Phone	Student
Ellen S Howell	Arecibo Observatory	ehowell@naic.edu	787-878-2612 x282	no

I do NOT want to do remote observing.

**Instrument Setup**

L-wide

**Atmospheric Optical Instruments:**

**Special Equipment or setup:** none

**RFI Considerations**

**Frequency Ranges Planned**

1610-1615  
1660-1670

This proposal requires Iridium RFI protection at 1612 MHz between 10pm and 6am EST.