

## Technical Page

Proposal Type: Short  
 General Category: Astronomy  
 Sub-Category: Spectroscopy  
 Observation Category: Extragalactic  
 Total Time Requested: 2 Hours  
 Minimum Useful Time: 1 hr

**Proposal Title:** High-z Maser Follow-up Observation

**ABSTRACT:**

Reexamination of spectra from a large Arecibo survey for high-z water masers in radio galaxies has turned up a possible detection that we wish to confirm or deny. We request 2 hours to check if the signal in the original 1 hour observation is real. The importance of high-z water masers lies in their use as probes of AGN tori and black hole masses, and as potential cosmological tools for determination of the cosmological constant  $\lambda$  via direct angular-size distance determination.

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### Remote Observing Request

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

### Instrument Setup

X-high

### Atmospheric Observation Instruments:

**Special Equipment or setup:** none

### RFI Considerations

### Frequency Ranges Planned