

## Technical Page

This proposal has been submitted before.

The previous proposal number is a2857.

Proposal Type: Regular  
 General Category: Astronomy  
 Sub-Category: Continuum  
 Observation Category: Galactic  
 Total Time Requested: 50 Hours  
 Minimum Useful Time: 2 hours

**Proposal Title:** A Multifrequency Search for Flaring Radio Emission from the HR 8799 Planetary System

*ABSTRACT:*

We propose to conduct an extensive, multifrequency search for radio flares from the HR 8799 system of 4 young, massive planets using the Arecibo radio telescope at 327, 1400, and 3500 MHz, and the Mock spectrometer. The proposal is motivated by our recent detections of radio flares from two T-dwarfs, which have similar temperatures to those of the HR 8799 planets. Detection of radio emission from exoplanets has a potential to significantly extend the experimental basis for studies of their physics, and detecting and characterizing exoplanetary fields would obviously inform the investigations of planetary habitability.

Name	Institution	E-mail	Phone	Student
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### Remote Observing Request

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

### Instrument Setup

L-wide                      327                      S-high

### Atmospheric Observation Instruments:

**Special Equipment or setup:** Need reinstallation of the s-band high receiver!

**RFI Considerations**

**Frequency Ranges Planned**