

## Technical Page

Proposal Type: Regular  
 General Category: Astronomy  
 Sub-Category: Spectroscopy  
 Observation Category: Extragalactic  
 Total Time Requested: 40 Hours

**Proposal Title:** A  $\lambda 21$ -cm Search for Low- $z$  Damped Ly- $\alpha$  Systems towards Compact Radio Sources

**ABSTRACT:**

We propose a search for Damped Lyman-Alpha (DLA) systems at low redshift ( $z < 0.3$ ) via their  $\lambda 21$ -cm absorption lines against the continuum emission of  $\sim 200$  distant ( $z > 0.3$ ) compact radio sources. Being totally unbiased in respect of any known properties of the DLAs, this will help improve the currently poor DLA statistics for  $0 < z < 0.3$ , and the HI mass fraction at  $z \sim 0$ . The detected DLA systems will contribute to the studies of the cosmological evolution of DLAs, and their interstellar media.

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

- None  
 All of the observing run.  
 Part of the observing run.  
 Queue Observing

### Remote Observing Request

- No  
 Maybe  
 Yes

### Instrument Setup

L-wide

### Atmospheric Observation Instruments:

**Special Equipment or setup:** none

### RFI Considerations

### Frequency Ranges Planned

1100 - 1400 MHz

This proposal requires coordination with Punta Salinas radar within the band 1222-1381 MHz..

This proposal requires coordination with GPS L3 at 1381 MHz.