

Technical Page

Proposal Type: Regular
 General Category: Astronomy
 Sub-Category: Spectroscopy
 Observation Category: Extragalactic
 Total Time Requested: 96 Hours

Proposal Title: An HI Study of the Ly α Absorber/Galaxy Connection

ABSTRACT:

We propose a deep 21 cm study of the regions surrounding 21 low redshift Ly α absorption line systems along 4 lines of sight. This sample includes all of the accessible, low redshift, Ly α forest systems that have been identified to date. We will use these systems to search for low surface brightness HI-rich galaxies/proto-galaxies near the absorber. Any HI sources found will provide a measure of the galaxy/absorber connection that is unbiased by the optical properties of the galaxy. We will also study the 140-1200 kpc region (depending on the source redshift) surrounding the line of sight to look for an excess of HI sources which might indicate the presence of large scale HI features. This proposal requests longer integration times than our previous one, allowing us to probe for lower mass systems.

Name	Institution	E-mail	Phone	Student
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I do NOT want to do remote observing.

Instrument Setup

L-narrow

Atmospheric Optical Instruments:

Special Equipment or setup: none

RFI Considerations

Frequency Ranges Planned

1370 - 1420