Observing Application

Date :	Dec, 04 2009
Proposal ID :	VLA/09C-195
Legacy ID :	AY202
PI :	Ting Yan
Type :	Rapid Response - Exploratory Time
Category :	Extragalactic
Total Time :	4.0

Confirming the z~0.3 HI absorption in PKS 0859+032

Abstract:

We request a total of 4 hours of dynamic time to confirm the redshifted HI 21cm absorption lines in PKS 0859+032 discovered at the GBT. This project will utilize EVLA's new and extended L-band capabilities to carry out observations at 1.1 GHz frequency. We hope that in addition to confirming the new HI detections at z~0.3, these will serve as a demonstrator for future redshifted HI science at z~0.3-0.5 with the EVLA. Night time observing is required in the current D-configuration to minimize the effect of the RFI due to DME's.

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Related proposals:

Joint:

Not a Joint Proposal

Observing type(s):

Spectroscopy

VLA Resources

Name	Conf.	Frontend & Backend	Setup

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HI	D	L Band 20 cm 1000 - 2000 MHz VLA Correlator - Spectral Line	Rest frequencies: 1103.5 MHz Bandwidth: 3.125 MHz Spectral resolution: 24.414 kHz IF Mode: null No. of Channels: 128

Sources:

Name	RA / RA Range	Dec / Dec Range	Epoch	Velocity / z	Group
PKS 0859+032	09:01:50.1 00:00:00.0	+03:04:22 00:00:00	J2000	Redshift : 0.2872	PKS_HI

Sessions:

Name	Session Time (hours)	Repeat	Separation	LST minimum	LST maximum	Elevation Minimum
PKS_HIabs	2.00	2	0 day	05:30:00	12:30:00	30

Session Constraints:

Name	Constraints	Comments
PKS_HIabs	Night time observing is requested to avoid the RFI due to DME's which effects all the baselines in D-configuration.	

Session Source/Resource Pairs:

Session Name	Source	Resource	Time	Figure of Merit	Subarray
PKS_HIabs	PKS 0859+032	HI	2.0 hour	3 mJy/bm	

Present for observation: no Staff support: None Plan of Dissertation: no