Observing Application

Date :	Jun, 03 2008
Proposal ID :	VLA/08B-246
Legacy ID :	AB1310
PI :	Alberto Bolatto
Type :	Rapid Response - Exploratory Time
Category :	Galactic, Extragalactic
Total Time :	2.0

The Galactic foreground of I Zw 18

Abstract:

We have just obtained very deep Spitzer observations of the far infrared in I Zw 18, the lowest metallicity galaxy know (the data was released to us four weeks ago). The purpose of these observations is to measure the dust-to-gas ratio in this object. It is evident that our 160 um image suffers heavily from foreground contamination, caused by Galactic cirrus. We request a short VLA observation to obtain a map of the Galactic HI at 40 arcsec resolution in the direction of I Zw 18, to serve as a template in the modeling and removal of the contaminating foreground. Removal of the foreground is crucial in order to measure the FIR flux of the source, and its dust content.

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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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D-array	D	L Band 20 cm 1000 - 2000 MHz VLA Correlator - Spectral Line	Rest frequencies: 1420.40575 MHz Bandwidth: 1.5625 MHz Spectral resolution: 6.104 kHz IF Mode: 2 No. of Channels: 256

Sources:

Name	RA / RA Range	Dec / Dec Range	Epoch	Velocity / z	Group
I zw 18	09:34:02.0 00:00:00.0	+55:14:28 00:00:00	J2000	Velocity : 0.00	I Zw 18

Sessions:

Name	Session Time (hours)	Repeat	Separation	LST minimum	LST maximum	Elevation Minimum
1	2.00	1	0 day	08:00:00	11:00:00	30

Session Constraints:

Name	Constraints	Comments

Session Source/Resource Pairs:

Session Name	Source	Resource	Time	Figure of Merit	Subarray
1	I zw 18	D-array	2.0 hour	0.7 mJy/bm	

Present for observation: no Staff support: Consultation Plan of Dissertation: no