



Observing Application

Date : Sep, 02 2009
 Proposal ID : VLA/09B-213
 Legacy ID : AS1001
 PI : Alicia Soderberg
 Type : Rapid Response - Target of Opportunity
 Category : Extragalactic
 Total Time : 1.5

A Radio Search for Non-thermal Emission from LBV Outburst SN2009ip

Abstract:

Supernova candidate SN 2009ip was discovered on 2009 Aug 26 in nearby galaxy NGC 7259. Historical imaging data and recent spectroscopy indicate that the transient source is actually a giant outburst from a Luminous Blue Variable star and not a supernova explosion. LBV outbursts have been shown to have detectable radio counterparts (e.g., SN 1961V) but have been poorly observed due to their rarity. Here we propose radio observations to search for a non-thermal counterpart to this newly identified LBV.

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Related proposals:

Joint:

Not a Joint Proposal

Observing type(s):

Continuum

VLA Resources

Name	Conf.	Frontend & Backend	Setup
xband	C	X Band 3.6 cm 8080 - 8750 MHz VLA Correlator - Single Channel Continuum	Rest frequencies: 8435.1,8485.1 MHz Bandwidth: 50 MHz
kband	C	K Band 1.3 cm 18000 - 26500 MHz VLA Correlator - Single Channel Continuum	Rest frequencies: 22485.1,22435.1 MHz Bandwidth: 50 MHz

Sources:

Name	RA / RA Range	Dec / Dec Range	Epoch	Velocity / z	Group
SN2009ip	22:23:08.3 00:00:00.1	-28:56:52 00:00:01	J2000	Redshift : 0.006	SN2009ip Group

Sessions:

Name	Session Time (hours)	Repeat	Separation	LST minimum	LST maximum	Elevation Minimum
xband	0.50	1	0 day	19:00:00	24:00:00	0
kband	1.00	1	0 day	19:00:00	24:00:00	0

Session Constraints:

Name	Constraints	Comments

Session Source/Resource Pairs:

Session Name	Source	Resource	Time	Figure of Merit	Subarray
xband	SN2009ip	xband	0.5 hour	0.1 mJy/bm	
kband	SN2009ip	kband	1.0 hour	0.1 mJy/bm	

Present for observation: no

Staff support: None

Plan of Dissertation: no