Observing Application

Date :	Aug, 27 2009
Proposal ID :	VLA/09B-212
Legacy ID :	AK720
PI :	Miriam Krauss-Hartman
Type :	Rapid Response - Target of Opportunity
Category :	Stellar, Galactic
Total Time :	2.0

Characterizing the Early Radio Emission of V2672 Ophiuchi

Abstract:

The nova V2672 Ophiuchi was discovered on 16 Aug 2009, and has spectral and temporal similarities to recurrent novae, making it an especially unique and interesting source. Its optical spectrum reveals a broad (8000 km/s FWHM) H-alpha line, and an X-ray spectrum is consistent with emission from shocked circumstellar material. We request two 1-hour-long VLA X-band observations separated by 4 weeks to detect any possible radio emission associated with this outburst. Radio data would enhance the multi-wavelength campaign currently underway, adding valuable information about the nature and evolution of V2672 Ophiuchi.

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Related proposals:

Joint:

Not a Joint Proposal

Observing type(s):

Continuum

VLA Resources

Name	Conf.	Frontend & Backend	Setup
Obs 1	C	X Band 3.6 cm 8080 - 8750 MHz VLA Correlator - Single Channel Continuum	Rest frequencies: 8435.1,8485.1 MHz Bandwidth: 50 MHz

Name	Conf.	Frontend & Backend	Setup
Obs 2	DnC	X Band 3.6 cm 8080 - 8750 MHz VLA Correlator - Single Channel Continuum	Rest frequencies: 8435.1,8485.1 MHz Bandwidth: 50 MHz

Sources:

Name	RA / RA Range	Dec / Dec Range	Epoch	Velocity / z	Group
V2672 Oph	17:38:19.7 00:00:00.0	-26:44:14 00:00:00	J2000	Velocity : 0.00	V2672 Ophiuchi

Sessions:

Name	Session Time (hours)	Repeat	Separation	LST minimum	LST maximum	Elevation Minimum
VLA C	1.00	1	0 day	14:00:00	21:00:00	0
VLA DnC	1.00	1	0 day	14:00:00	21:00:00	0

Session Constraints:

Name	Constraints	Comments
VLA C		
VLA DnC		We request that the second (DnC configuration)observation be 28(+-7) days after the first (C configuration) observation.

Session Source/Resource Pairs:

Session Name	Source	Resource	Time	Figure of Merit	Subarray
VLA C	V2672 Oph	Obs 1	1.0 hour	0.024 mJy/bm	
VLA DnC	V2672 Oph	Obs 2	1.0 hour	0.024 mJy/bm	

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