



Observing Application

Date : May, 16 2008
 Proposal ID : VLA/08A-242
 Legacy ID : AS950
 PI : Alicia Soderberg
 Type : Rapid Response - Target of Opportunity
 Category : Extragalactic
 Total Time : 1.0

Revealing the Nature of the Mysterious Transient in NGC 300

Abstract:

The transient in NGC 300 was discovered optically on May 14.1 UT (IAUC 8946) with a magnitude of 14.2 (abs mag = -12.5). A spectrum revealed strong emission lines including unexpected forbidden [Ca II] at 7300 Ang. The combination of spectral features and absolute magnitude rules out the possibility that it is a classical nova, a luminous blue variable, or a supernova. In fact it appears very similar to V838 Mon at early time. This mysterious transient could provide a glimpse of stellar collision or merger.

Authors:

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Related proposals:

Joint:

Not a Joint Proposal

Observing type(s):

Continuum

VLA Resources

Name	Conf.	Frontend & Backend	Setup
X	C	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
NGC300-S1	00:54:34.2 00:00:00.0	-37:38:28 00:00:01	J2000	Velocity : 0.00048	NGC300

Sessions:

Name	Session Time (hours)	Repeat	Separation	LST minimum	LST maximum	Elevation Minimum
X-band	1.00	1	0 day	23:00:00	02:00:00	0

Session Constraints:

Name	Constraints	Comments

Session Source/Resource Pairs:

Session Name	Source	Resource	Time	Figure of Merit	Subarray
X-band	NGC300-S1	X	1.0 hour	0.03 mJy/bm	

Present for observation: no

Staff support: None

Plan of Dissertation: no