



# Observing Application

Date : Mar, 25 2010  
 Proposal ID : VLBA/10A-144  
 Legacy ID : BK166  
 PI : Elmar Koerding  
 Type : Rapid Response - Target  
 of Opportunity  
 Category : Galactic  
 Total Time : 24.0

## Monitoring the likely GeV emitting Nova V407 Cyg

### Abstract:

The symbiotic star V407 Cyg has recently shown a classical nova outburst. The Fermi Large Area Telescope has found a GeV flare which is spatially coincident with V407 Cyg slightly after the optical outburst. The possibility that novae produce GeV emission has not been expected. Due to the low frequency of recurrent nova outbursts this object may be a unique possibility to study a GeV producing Nova. Here we propose to monitor the source three times at 1.6, 5 and 8.5 GHz with the VLBA.

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### Related proposals:

### Joint:

Not a Joint Proposal

### Observing type(s):

Continuum, Monitoring

## VLBA Resources

Name	Wavelength	Processor	Stations	Observing Parameters	Correlation Parameters
6cm	6 cm	Socorro-DiFX	VLBA <input checked="" type="checkbox"/> Br <input checked="" type="checkbox"/> Fd <input checked="" type="checkbox"/> Hn <input checked="" type="checkbox"/> Kp <input checked="" type="checkbox"/> La <input checked="" type="checkbox"/> Mk <input checked="" type="checkbox"/> Kp <input checked="" type="checkbox"/> Ov <input checked="" type="checkbox"/> Pt <input checked="" type="checkbox"/> Sc <input checked="" type="checkbox"/> HSA Ar Ef GBT VLA-Y27 VLA-Y1 Geodetic	Bandwidth: 16 MHz Baseband Channels 4 Sample Rate (Msample/s) 32 Bits/Sample 2 Polarization RCP & Agg. Bit Rate (Mbits/sec) 256	Full Polarization <input checked="" type="checkbox"/> Pulsar Gate Correlator Passes 1 Integration Period (sec) 2.0 Spectral Points /BBC 8 No of Fields 1
3.6cm	3.6 cm	Socorro-DiFX	VLBA <input checked="" type="checkbox"/> Br <input checked="" type="checkbox"/> Fd <input checked="" type="checkbox"/> Hn <input checked="" type="checkbox"/> Kp <input checked="" type="checkbox"/> La <input checked="" type="checkbox"/> Mk <input checked="" type="checkbox"/> Kp <input checked="" type="checkbox"/> Ov <input checked="" type="checkbox"/> Pt <input checked="" type="checkbox"/> Sc <input checked="" type="checkbox"/> HSA Ar Ef GBT VLA-Y27 VLA-Y1 Geodetic	Bandwidth: 16 MHz Baseband Channels 4 Sample Rate (Msample/s) 32 Bits/Sample 2 Polarization RCP & Agg. Bit Rate (Mbits/sec) 256	Full Polarization <input checked="" type="checkbox"/> Pulsar Gate Correlator Passes 1 Integration Period (sec) 2.0 Spectral Points /BBC 8 No of Fields 1
21cm	21 cm	Socorro-DiFX	VLBA <input checked="" type="checkbox"/> Br <input checked="" type="checkbox"/> Fd <input checked="" type="checkbox"/> Hn <input checked="" type="checkbox"/> Kp <input checked="" type="checkbox"/> La <input checked="" type="checkbox"/> Mk <input checked="" type="checkbox"/> Kp <input checked="" type="checkbox"/> Ov <input checked="" type="checkbox"/> Pt <input checked="" type="checkbox"/> Sc <input checked="" type="checkbox"/> HSA Ar Ef GBT VLA-Y27 VLA-Y1 Geodetic	Bandwidth: 16 MHz Baseband Channels 4 Sample Rate (Msample/s) 32 Bits/Sample 2 Polarization RCP & Agg. Bit Rate (Mbits/sec) 256	Full Polarization <input checked="" type="checkbox"/> Pulsar Gate Correlator Passes 1 Integration Period (sec) 2.0 Spectral Points /BBC 8 No of Fields 1

## Sources:

Name	Position		Velocity		Group
V407Cyg	Coordinate System	Equatorial	Convention	Radio	V407 Cyg
	Equinox	J2000			
	Right Ascension	21:02:09.8	Ref. Frame	LSRK	
		00:00:00.0			
Declination	+45:46:33	Velocity	0.00		
	00:00:00				

## Sessions:

Name	Session Time (hours)	Repeat	Separation	GST minimum	GST maximum	Elevation Minimum
Monitor	8.00	3	5 day	00:00:00	08:00:00	0

## Session Constraints:

Name	Constraints	Comments