



# Observing Application

Date : Apr, 17 2010  
 Proposal ID : VLA/10A-259  
 Legacy ID : AK745  
 PI : Shri Kulkarni  
 Type : Rapid Response - Target of Opportunity  
 Category : Extragalactic  
 Total Time : 2.0

## PTF 10fq5 - A transient in M99

### Abstract:

On April 16th (yesterday) the Palomar Transient Factory (PTF) discovered a possible transient in a spiral arm in Messier 99. The discovery images show that the transient absolute magnitude is about -11.5. The distance to M99 is only 18 Mpc. We request for ToO observations of PTF 10fq5 as soon as possible, even before we get a spectrum for classification. Based on its magnitude, and location within M99 this is most probably a very young SN. Regardless of its type radio observations of young (and nearby) SNe provide a rare opportunity to probe the circumstellar matter around SN progenitors.

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### Related proposals:

### Joint:

Not a Joint Proposal

### Observing type(s):

Continuum

## VLA Resources

Name	Conf.	Frontend & Backend	Setup
D-L	D	L Band 20 cm 1000 - 2000 MHz  WIDAR OSRO1: 2 Subbands/Full polz	Rest frequencies: 1350.0, 1810.0 MHz Bandwidth: 128.0 MHz No. of Channels: 64 Poln. products: 4.0 Channel Width: 128.0 MHz
D-C	D	C Band 6 cm 4000-8000 MHz  WIDAR OSRO1: 2 Subbands/Full polz	Rest frequencies: 4896.0, 5024.0 MHz Bandwidth: 128.0 MHz No. of Channels: 64 Poln. products: 4.0 Channel Width: 128.0 MHz
D-X	D	X Band 3.6 cm 8080 - 8750 MHz  WIDAR OSRO1: 2 Subbands/Full polz	Rest frequencies: 8396.0, 8524.0 MHz Bandwidth: 128.0 MHz No. of Channels: 64 Poln. products: 4.0 Channel Width: 128.0 MHz

## Sources:

Name	Position		Velocity		Group
PTF 10fqs	Coordinate System	Equatorial	Convention	Radio	PTF10fqs
	Equinox	J2000			
	Right Ascension	12:18:50.16 00:00:01.0	Ref. Frame	LSRK	
	Declination	+14:26:39 00:00:01	Velocity	0.00	

## Sessions:

Name	Session Time (hours)	Repeat	Separation	LST minimum	LST maximum	Elevation Minimum
Trigger1	2.00	1	0 day	09:00:00	15:00:00	0

## Session Constraints:

Name	Constraints	Comments

## Session Source/Resource Pairs:

Session Name	Source	Resource	Time	Figure of Merit	Subarray
Trigger1	PTF 10fqs	D-C	0.8 hour	0.018 mJy/bm	
Trigger1	PTF 10fqs	D-X	0.8 hour	0.017 mJy/bm	
Trigger1	PTF 10fqs	D-L	0.4 hour	0.050 mJy/bm	

Present for observation: no

Staff support: None

Plan of Dissertation: yes