



11111 - A Search for an Intermediate Mass Black Hole in the Globular Cluster NGC 6266

Cycle: 16, Proposal Category: GO
(Availability Mode: SUPPORTED)

INVESTIGATORS

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VISITS

<i>Visit</i>	<i>Targets used in Visit</i>	<i>Configurations used in Visit</i>	<i>Orbits Used</i>	<i>Last Orbit Planner Run</i>	<i>OP Current with Visit?</i>
01	(1) NGC-6266	WFPC2	2	17-Jan-2008 19:16:31.0	yes

2 Total Orbits Used

ABSTRACT

We propose to search for an intermediate mass black hole (IMBH) in the core of the galactic globular cluster NGC 6266. Based on a comparison between the observed central surface brightness profiles of 38 globular clusters and state-of-the art N-body simulations, NGC 6266 offers the best hope of detecting an IMBH among these objects. This detection would be significant for at least two reasons. It would be the first concrete discovery of an IMBH, revealing unique information about the environment in which these objects form, and second, its discovery would provide a powerful

validation on the N-body simulations used to track the dynamical evolution of globular clusters.

OBSERVING DESCRIPTION

stuff

REAL TIME JUSTIFICATION

none

CALIBRATION JUSTIFICATION

none

ADDITIONAL COMMENTS

none

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Fri Jan 18 00:16:37 GMT 2008

Visit	Proposal 11111, Visit 01, implementation Diagnostic Status: No Diagnostics Scientific Instruments: WFPC2 Special Requirements: ORIENT 287.12D TO 287.12 D									
	Patterns	#	Primary Pattern			Secondary Pattern			Exposures	
		(1)	Pattern Type=WFPC2-BOX Purpose=DITHER Number Of Points=4 Point Spacing=0.559017 Line Spacing=0.559017	Coordinate Frame=POS-TARG Pattern Orientation=26.56505 Angle Between Sides=143.1301 Center Pattern=false						
Fixed Targets	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous				
	(1)	NGC-6266	RA: 17 01 12.6400 (255.3026667d) Dec: -30 06 45.30 (-30.11258d) Equinox: J2000	Proper Motion RA: 0s/yr Proper Motion Dec: 0"/yr Parallax: 0" Epoch of Position: Radial Velocity: 0 km/sec	V=7.39+/-0.1	Reference Frame: SIMBAD				
Exposures	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	1	Dither	(1) NGC-6266	WFPC2, IMAGE, PC1-FIX	F555W			Pattern 1-1 (1)	3.0 Secs [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[1]
	2		(1) NGC-6266	WFPC2, IMAGE, PC1-FIX	F555W				30.0 Secs X 2 [==>(Copy 1)] [==>(Copy 2)]	[1]
	3		(1) NGC-6266	WFPC2, IMAGE, PC1-FIX	F555W				140.0 Secs X 4 [==>(Copy 1)] [==>(Copy 2)] [==>(Copy 3)] [==>(Copy 4)]	[1]
	4	Dither	(1) NGC-6266	WFPC2, IMAGE, PC1-FIX	F555W			Pattern 4-4 (1)	1.0 Secs [==>(Pattern 1)] [==>(Pattern 2)] [==>(Pattern 3)] [==>(Pattern 4)]	[2]
	5		(1) NGC-6266	WFPC2, IMAGE, PC1-FIX	F555W				30.0 Secs X 2 [==>(Copy 1)] [==>(Copy 2)]	[2]

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Exposures (continued)	#	Label	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
	6		(1) NGC-6266	WFPC2, IMAGE, PC1-FIX	F555W				140.0 Secs X 4 [==>(Copy 1)] [==>(Copy 2)] [==>(Copy 3)] [==>(Copy 4)]	[2]



