



11834 - Deconstructing AGN X-ray Spectra - Time for a Paradigm Shift?

Cycle: 17, 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-4051	COS/FUV COS/NUV	4	22-May-2009 21:06:14.0	yes

4 Total Orbits Used

ABSTRACT

We aim to detect and measure the ionization state and outflow velocities in the well-studied low-BH-mass AGN NGC 4051. We have been granted a 340 ks Suzaku observation to study continuum and low-resolution line spectral variability; HETG spectroscopy complements this by isolating narrow absorption lines

arising from key zones of gas, allowing us to measure ionization, column and outflow velocities of the multiple ionized zones. A moderately ionized zone in particular can mimic the appearance of a broad Fe emission line but can be revealed by 6.5 keV Fe K α absorption, for which there is already tentative evidence. A 320 ks HETG exposure will provide powerful diagnostic signatures across a wide range of ionisation. We also request HST time for tie-in UV spectroscopy.

OBSERVING DESCRIPTION

We will obtain G130M and G160M spectra of the nucleus of NGC 4051 during a single visit. Two orbits will be used to obtain G130M spectra at two different wavelength settings, to cover the wavelength gap. The same will be done with the G160M spectra, resulting in a total of 4 orbits.

Proposal 11834 - Visit 01 - Deconstructing AGN X-ray Spectra - Time for a Paradigm Shift?

Sat May 23 01:06:19 GMT 2009

Visit	Proposal 11834, Visit 01, implementation Diagnostic Status: Warning Scientific Instruments: COS/NUV, COS/FUV Special Requirements: SCHED 100% <i>Comments: Schedule as soon as practical, because the X-ray observations of this variable Seyfert have already occurred.</i>																																																																											
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Fixed Targets	<table border="1"> <thead> <tr> <th>#</th> <th>Name</th> <th>Target Coordinates</th> <th>Targ. Coord. Corrections</th> <th>Fluxes</th> <th>Miscellaneous</th> </tr> </thead> <tbody> <tr> <td>(1)</td> <td>NGC-4051</td> <td>RA: 12 03 9.6000 (180.7900000d) Dec: +44 31 52.80 (44.53133d) Equinox: J2000</td> <td></td> <td>V=13.1+/-0.5 Flux (1290 Ang.) = 1.3E-14</td> <td>Reference Frame: ICRS</td> </tr> </tbody> </table>	#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous	(1)	NGC-4051	RA: 12 03 9.6000 (180.7900000d) Dec: +44 31 52.80 (44.53133d) Equinox: J2000		V=13.1+/-0.5 Flux (1290 Ang.) = 1.3E-14	Reference Frame: ICRS	<i>Comments: This object was generated by the targetselector and retrieved from the NED database.</i>																																																														
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