



Astrophysics > Instrumentation and Methods for Astrophysics

X-ray variability with WFXT: AGNs, transients and more

Maurizio Paolillo, [Ciro Pinto](#), [Viola Allevato](#), [Domitilla de Martino](#), [Massimo della Valle](#), [Iossif Papadakis](#), [Roberto Gilli](#), [Paolo Tozzi](#), the WFXT collaboration

(Submitted on 28 Oct 2010 (v1), last revised 29 Oct 2010 (this version, v2))

The Wide Field X-ray Telescope (WFXT) is a proposed mission with a high survey speed, due to the combination of large field of view (FOV) and effective area, i.e. grasp, and sharp PSF across the whole FOV. These characteristics make it suitable to detect a large number of variable and transient X-ray sources during its operating lifetime. Here we present estimates of the WFXT capabilities in the time domain, allowing to study the variability of thousand of AGNs with significant detail, as well as to constrain the rates and properties of hundreds of distant, faint and/or rare objects such as X-ray Flashes/faint GRBs, Tidal Disruption Events, ULXs, Type-I bursts etc. The planned WFXT extragalactic surveys will thus allow to trace variable and transient X-ray populations over large cosmological volumes.

Comments: Proceedings of "The Wide Field X-ray Telescope Workshop", held in Bologna, Italy, Nov. 25-26 2009 ([arXiv:1010.5889](#)). To appear in *Memorie della Societ`a Astronomica Italiana* 2010 - Minor corrections to text-

Subjects: **Instrumentation and Methods for Astrophysics (astro-ph.IM)**; High Energy Astrophysical Phenomena (astro-ph.HE)

Report number: WFXTconf/2009/05

Cite as: [arXiv:1010.5922v2](#) [astro-ph.IM]

Submission history

From: Maurizio Paolillo [[view email](#)]

[v1] Thu, 28 Oct 2010 11:14:15 GMT (1106kb)

[v2] Fri, 29 Oct 2010 13:43:54 GMT (1106kb)

Which authors of this paper are endorsers?

Download:

- [PDF](#)
- [PostScript](#)
- [Other formats](#)

Current browse context:

astro-ph.IM

[< prev](#) | [next >](#)

[new](#) | [recent](#) | [1010](#)

Change to browse by:

[astro-ph](#)

[astro-ph.HE](#)

References & Citations

- [SLAC-SPIRES HEP](#)
([refers to](#) | [cited by](#))
- [NASA ADS](#)

Bookmark([what is this?](#))

