

Early X-Ray Astrophysics and XMM-Newton: Panel Discussion

20th Anniversary Celebration Event

ESAC, Villafranca del Castillo, Spain, December 10-11, 2019

Norbert Schartel in cooperation with Luisa Bonolis (Max-Planck-Institut für Wissenschaftsgeschichte)

RECOLLECTIONS

[Roots of the XMM-Newton Space Observatory: A blast from the past](#), Johan Bleeker and Brian Taylor

[Realization of the Reflection Grating Spectrometer on XMM-Newton](#), Jan-Willem den Herder

[Recollections on X-ray Optics and satellite developments for XMM-Newton](#), Robert Lainé, with support from Daniel de Chambure

[Recollections of XMM](#), David Lumb

[XMM OM history \(video\)](#), Keith Mason

[X-ray astronomy and Eddington winds](#), Ken Pounds

[The development and use of the pnCCDs for science and industry](#), Lothar Strüder

[The XMM 20 year reunion - random thoughts for the panel discussion](#), Brian Taylor

[XMM, I remember...](#), Gabriele Villa

X M M



A PROPOSAL TO ESA FOR AN
X-RAY MULTI-MIRROR
ASTRONOMY MISSION

Submitted by

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November, 1982

esa SP-239

An ESA Workshop on a Cosmic
X-Ray Spectroscopy Mission



A Cornerstone of the ESA
Long-term Space Science Programme

Lyngby, Denmark
24 – 26 June 1985

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european space agency

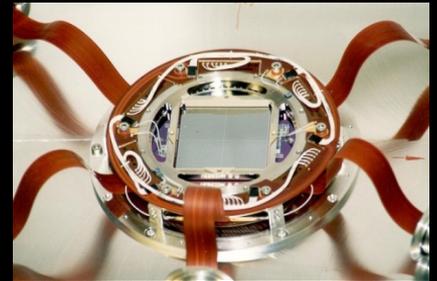
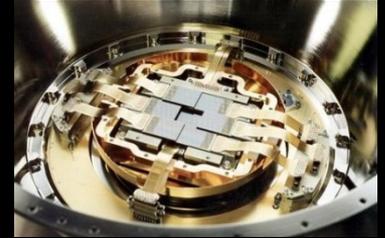
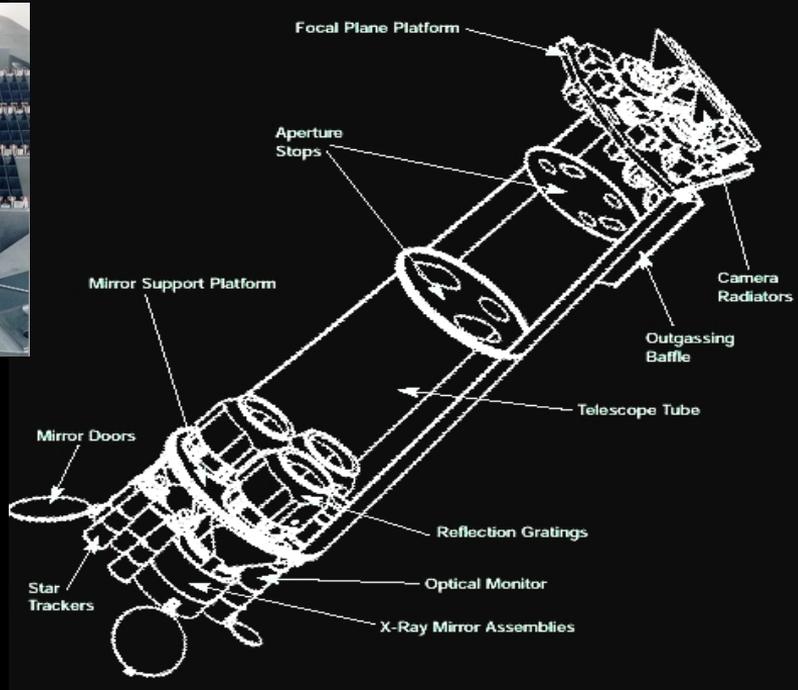
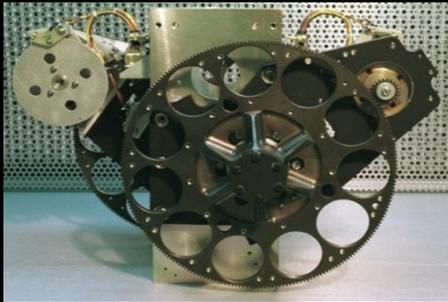


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Instruments



XMM-Newton

- 3 Mirror Modules / highest effective collecting area ever
- Six simultaneously observing instruments:
 - 3 CCD cameras (one **pn** and two **MOSs**)
 - 2 spectrometers (**RGS**)
 - 1 Optical Monitor (**OM**)



xmm20anniversary.esa.int

The background of the entire page is a composite image. On the left, the XMM-Newton satellite is shown in orbit, with its distinctive gold-colored X-ray mirrors and various instruments. The satellite is positioned against the blackness of space, with a few distant stars visible. On the right, a large, curved portion of the Earth is shown, featuring swirling white clouds and dark blue oceans. The sun's bright light is visible on the far left, creating a lens flare effect that illuminates the scene.

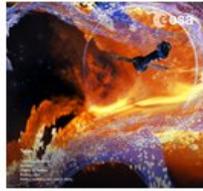
XMM-NEWTON 20th ANNIVERSARY

Explore this page for news and other material. Stay tuned for much more to come!





HEAD Meeting
Special session XMM-Newton
Monterey, CA, USA
17-21 March 2019



"Astrophysics of hot plasma in
extended X-ray sources"
XMM-Newton Workshop
ESAC, Madrid, Spain
12-14 June 2019



X-ray Astronomy
Special Lecture about XMM-Newton mission
Bologna, Italy
8-13 September 2019



XMM-Newton 20th Anniversary
Goddard Symposium
GSFC, Greenbelt, MD, USA
21-22 October 2019



Spanish X-Ray Astronomy 2019:
present, future and synergies
Alicante, Spain
26-27 November 2019



Twenty Years of Chandra Science
Symposium
Boston, MA, USA
3-6 December 2019



X-ray Astrophysics from
XMM-Newton to Athena: The
heritage of XMM and opportunities
of Athena
Specialist Discussion Meeting
Royal Astronomical Society, London, UK
13 December 2019



The X-ray Universe
ESLAB, ESTEC, The Netherlands
25-27 May 2020



XMM-Newton: Current scientific
highlights and future prospects
European Astronomical Society
Leiden, The Netherlands
29 June - 3 July 2020



[XMM-Newton: 20 años observando el universo más violento \(Spanish\)](#)

J. Ebrero, Revista Astronomía, no.246, p.28-37



[Ils radiographient le cosmos depuis vingt ans \(French\)](#)

Y. Nazé, La Recherche, mensuel 554, Dec 2019



[Blick ins heiÙe Universum \(German\)](#)

(full article - restricted)

Norbert ScharTEL & Günther Hasinger, Physik Journal 12, Seite 41, 2019



[Revealing the X-Ray Universe](#)

Sky and Telescope, Issue August 2019



[7 Incredible Discoveries from Two Decades of X-rays](#)

Sky and Telescope, 18 June 2019

PAPERS