

Silicon Pore Optics development for ATHENA - DTU Orbit (08/11/2017)

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The ATHENA mission, a European large (L) class X-ray observatory to be launched in 2028, will essentially consist of an X-ray lens and two focal plane instruments. The lens, based on a Wolter-I type double reflection grazing incidence angle design, will be very large (similar to 3 m in diameter) to meet the science requirements of large effective area (1-2 m²) at a few keV) at a focal length of 12 m. To meet the high angular resolution (5 arc seconds) requirement the X-ray lens will also need to be very accurate. Silicon Pore Optics (SPO) technology has been invented to enable building such a lens and thus enabling the ATHENA mission. We will report in this paper on the latest status of the development, including details of X-ray test campaigns.

General information

State: Published

Organisations: National Space Institute, Astrophysics, Cosine Science and Computing B.V., Micronit Microfluidics B.V., SRON, Physikalisch-Technische Bundesanstalt, Max-Planck Institut für Extraterrestrische Physik, National Institute for Astrophysics, ESTEC

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Number of pages: 11

Publication date: 2015

Host publication information

Title of host publication: Proceedings of SPIE

Volume: 9603

Publisher: SPIE - International Society for Optical Engineering

Article number: 96030K

Series: Proceedings of SPIE, the International Society for Optical Engineering

Volume: 9603

ISSN: 0277-786X

Main Research Area: Technical/natural sciences

Conference: Optics for EUV, X-Ray, and Gamma-Ray Astronomy VII, San Diego, United States, 10/08/2015 - 10/08/2015

X-ray optics, X-ray astronomy, silicon, wafer, stack, pore optics, X-ray telescopes, ATHENA, SPO

Electronic versions:

96030K.pdf

DOIs:

10.1117/12.2188988

Bibliographical note

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Source: FindIt

Source-ID: 2290010160

Publication: Research - peer-review › Article in proceedings – Annual report year: 2015