



X-RAY ASTRONOMY-2009:
PRESENT STATUS,
MULTI-WAVELENGTH
APPROACH AND
FUTURE PERSPECTIVES

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X-RAY ASTRONOMY-2009: PRESENT STATUS, MULTI-WAVELENGTH APPROACH AND FUTURE PERSPECTIVES

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X-ray Astronomy 2009 is the third X-ray Astronomy conference held in Bologna every ten years. The first – the 1989 ESLAB Symposium *Two Topics in X-ray Astronomy* – summarized the discoveries and results from HEAO-1, Einstein EXOSAT and Ginga, the major observatories that established X-ray Astronomy as a mainstream discipline. The second conference – *X-Ray Astronomy 1999: Stellar Endpoints, AGN and the Diffuse Background* – had a similar format. It was tailored on the successful results obtained by the next generation X-ray and Gamma ray observatories launched after 1990: ROSAT, ASCA, RXTE, BeppoSAX, and CGRO, as well as the first observations from Chandra – one of the great X-ray observatories of the new century.

Since then, X-ray Astronomy has evolved as an important branch of modern astrophysics research, which is characterized by a truly multiwavelength approach and reflected in the presentations of the 2009 meeting.

An excellent overview of the observational and theoretical aspects related to the study of a wide range of cosmic sources was presented over the five days conference. Some of the most important achievements of XMM-Newton, Chandra, Suzaku, Integral and Swift were highlighted along with associated synergies with major facilities, both ground and space based, at all wavelengths. Perspectives for future high-energy astrophysics missions were also presented.

These new and exciting results, presented at the *X-ray Astronomy 2009* conference were quite timely to celebrate the International Year of Astronomy (IYA2009) recurring in 2009.

The conference was organized jointly by the Italian National Institute for Astrophysics (INAF) and the Astronomy Department of Bologna University, with support by ESA and NASA.

The final scientific program was selected by the International Scientific Organizing Committee (SOC) chaired by Andrea Comastri (Bologna Astronomical Observatory – OABO) and composed by:

L. Angelini, X. Barcons, T. Belloni, N. Brandt, T. Courvoisier, A. Decourchelle, N. Gehrels, I. Georgantopoulos, P. Grandi, J. Greiner, K. Makishima, G. Malaguti, G. Micela, K. Nandra, A. Parmar, S. Schindler, R. Sunyaev, H. Tananbaum, P. Ubertini, C. Vignali, N. White.

(Institute for Space Astrophysics and Cosmic Physics - IASAC) with the following members:

G. Angelini, V. Bianchin, M. Dadina, L. Foschini, R. Gilli, K. Iwasawa, E. Maiorano, P. Ranalli, M. Spiga, C. Vignali, with the precious help of many graduate and under-graduate students and the fundamental support of Nextend staff.

The conference was held in the historical “Aula Magna di Santa Lucia” of the Bologna University and was attended by more than 350 scientists world wide. A special thanks to the LOC to secure that magnificent venue for the conference, run the logistics during the conference as well as organize many of the social events.

The conference also hosted special events. A conference and a public lectures were given by Riccardo Giacconi [Nobel Prize in Physics](#) in 2002 “for pioneering contributions to astrophysics, which have led to the discovery of cosmic X-ray sources.”

The conference included the celebration of Prof Giorgio Palumbo’s 70th birthday. Giorgio has been one of the leaders behind the success of the Astronomy Department of the Bologna University, as well as one of the pioneers of High Energy Astrophysics Research. A commemoration was held for two recently departed preeminent scientists of the European X-ray Astronomy, Prof. Martin Turner and Prof. Roberto Pallavicini Tesi, who are greatly missed, personally and professionally.