

Short biography, August 7, 2009

Riccardo Giacconi is University Professor at Johns Hopkins University in Baltimore, Maryland, in the USA. He was born in Genoa, Italy, October 6, 1931. He grew up in Milano and received his Dottorato from the University of Milano in 1956 with a thesis on cosmic ray astronomy, confirming one of Enrico Fermi's model of nuclear interactions. He held postdocs in high energy physics at Indiana University (on a Fulbright Fellowship) and at Princeton University before joining American Science and Engineering in 1959. He started a group to do space science, proposed the first X-Ray telescopes and designed and built x-ray instruments for rocket flights to search for x-ray stars. In 1962 his group flew a rocket that discovered the first X-ray star, Sco X-1. That discovery was the beginning of X-ray astronomy, leading to the X-ray satellites UHURU, Einstein and Chandra. He discovered the cosmic X-ray background, many binary x-ray stars that contain neutron stars or black holes and the massive X-ray halos of clusters of galaxies. For this initial work in X-ray astronomy, he received one half the 2002 Nobel Prize, along with Ray Davis and Masatoshi Koshiba (for the detection of astrophysical neutrinos).

He was appointed a professor at Harvard University in 1973. There, Giacconi and his team developed the "Einstein" satellite and sophisticated data management techniques to allow X-ray observatories to produce standard data products for use by astronomers world-wide. In 1982, he became the first Director of the Space Telescope Science Institute, applying the techniques developed for "Einstein" to create the operations planning and data reduction and archiving system for the Hubble Space Telescope. In 1990, he became the Director General of ESO and led the successful development of the four, 8-meter optical telescopes that make up the Very Large Telescope. In 1999, he returned to the USA as President of the Associated Universities, Inc., the consortium responsible for developing the Atacama Large Millimeter Array, due to be finished in 2012.

Riccardo Giacconi thus had a leading role in developing the largest telescopes in four areas of astronomy: X-ray, Ultraviolet, Optical and Radio. He has played an unparalleled role in the development of observational capabilities in the modern era.