

SYMPOSIUM ON TECHNOLOGICAL REQUIREMENTS FOR FUTURE SPACE ASTRONOMY AND
SOLAR-SYSTEM SCIENCE MISSIONS (A7)
Space-Agencies Long-Term Views (2)

Author: Prof. Pietro Ubertini
INAF, Italy, pietro.ubertini@iaps.inaf.it

FUTURE OF SPACE ASTRONOMY: THE END OF THE DARK AGES?

Abstract

The COSPAR President on April 20, 2010 appointed the Future of Space Astronomy Working Group under the aegis of Commission E, with the aim to analyze the difficult situation of space astronomy over the next two decades and recommend ways to improve the prospects. Having assessed the scientific needs and the current plans of the main space agencies worldwide, the WG initially identified some major concerns about the lack of a secured future for Space Astronomy. Two years after the publication of the COSPAR WG results and road map the outlook for the next 20 years is less negative while a number of important astrophysical programs are now secured. Among them the L1 and L2 ESA Large satellites and the NASA JWST, complemented by several medium and small size world-class missions. Very recently, a new endeavor is started between ESA and the Chinese Academy of Science to realize in partnership a joint scientific space mission.

The history of space astronomy, especially the past three decades, has demonstrated clearly the importance and benefits of access to the Gamma-ray, X-ray, UV-optical, near IR and far-IR spectrum from space. An update of the COSPAR WG conclusions will be given, in particular considering the scenario opened by the recent ESA decision on the next L-Class mission selection.