

# **Astrophysics in the Imaging X-ray Polarimetry Explorer (IXPE) Era**

*Monday 3 June 2024 14:55 (20 minutes)*

The Imaging X-ray Polarimetry Explorer (IXPE), a NASA-ASI discovery Small Explorer mission (SMEX), was launched on December 9, 2021, thanks to the efforts of determined X-ray astronomers and engineers aiming to revolutionize our understanding of celestial sources. This achievement was made possible by an instrument conceived, built, and calibrated in Italy by INAF and INFN, with the industrial contribution of OHB-Italia. In this presentation, I will review the main, and in many cases surprising, astrophysical results from the first two and a half years of IXPE in orbit, including significant X-ray polarimetry observations from supernova remnants and pulsar wind nebulae, magnetars, black holes and neutron star binaries, and active galactic nuclei.

## **sessioni congresso**

Astrofisica relativistica e particellare

**Primary author:** SOFFITTA, Paolo (Istituto Nazionale di Astrofisica (INAF))

**Presenter:** SOFFITTA, Paolo (Istituto Nazionale di Astrofisica (INAF))

**Session Classification:** Astrofisica Relativistica e Particellare