Special Issue

The Bright Future of Astronomical X-ray Polarimetry

Message from the Guest Editor

The exploration of astronomical X-ray polarimetry started at the end of the 1960s with Thomson-scattering polarimeters flown on rockets. Major discoveries regarding the physical processes behind solar flares and pulsar wind nebulae were made and the measurement of X-ray polarization unleashed new debates about the emission mechanisms of these sources. However, despite some important breakthroughs, no new X-ray polarimetric missions have been flown to ensure the sustainability of the field. Fifty years later, we are now on the verge to re-open this astrophysical window with the launch of several X-ray polarimeters. These detectors are based on state-ofthe-art technology and are a hundred times more sensitive than the pioneering instruments. It is now necessary to compile the scientific goals we intend to achieve thanks to the new missions. This Special Issue aims to present the up-to-date interdisciplinary theories and simulations to be compared to the future observational results in X-ray polarimetry.

Guest Editor

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Message from the Editorial Board

Galaxies provides an advanced forum for studies related to astronomy, astrophysics, and cosmology, including all of their subfields. Different formats, such as specialized research articles, reviews, communications and technical notes are welcomed. Manuscripts containing original and creative research proposals and ideas are especially appreciated.

We encourage scientists to publish their astronomical observations and theoretical results in as much detail as possible. There is no restriction on the paper length and full experimental and methodological details, as applicable, should be provided. All papers will be peer reviewed promptly. On behalf of the distinguished members of the editorial board, I extend my welcome to all researchers working on these subjects to contribute to *Galaxies*.

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