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Observational and Theoretical Strategies to Inquire about the Physics and Symmetries of Standard and Exotic Compact Objects

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Message from the Guest Editors

Dear Colleagues,

The actual breakthrough discoveries in high-energy astrophysics represented by the direct detection of gravitational waves and images of matter moving around a black hole led to significant developments in relativistic astrophysics. Indeed, new methodologies to investigate the physics and symmetries of standard (black holes and neutron stars) and exotic (wormholes, boson stars, etc.) compact objects have been and are still being proposed due to present and near-future sensitive data to be benchmarked with the outcomes from theoretical models.

This Special Issue aims to gather original observational and theoretical strategies in relativistic astrophysics with the goal to increase our knowledge around the physics of standard and exotic compact objects. An important issue is also represented by the symmetries imposed on the mathematical solutions to describe the aforementioned astrophysical objects. We cordially invite researchers to contribute their original and high-quality research papers which will inspire advances in observational and theoretical relativistic astrophysics.

Dr. Vittorio De Falco Dr. Daniele Vernieri Guest Editors









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Editor-in-Chief

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Message from the Editor-in-Chief

Symmetry is ultimately the most important concept in natural sciences. It is not surprising then that very basic and fundamental research achievements are related to symmetry. For instance, the Nobel Prize in Physics 1979 (Glashow, Salam, Weinberg) was received for a unified symmetry description of electromagnetic and weak interactions, while the Nobel Prize in Physics 2008 (Nambu, Kobayashi, Maskawa) was received for the discovery of the mechanism of spontaneous breaking of symmetry, including CP symmetry. Our journal is named *Symmetry* and it manifests its fundamental role in nature.

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