Special Issue

Magnetized Dense Matter in Compact Stars: From Fundamental Properties to Astrophysical Observables

Message from the Guest Editors

This Special Issue is a collection of articles on the properties of highly dense matter in strong magnetic fields and the implications for the physics of compact objects such as neutron stars. Neutron stars are known to have strong surface magnetic fields, with magnetars having surface fields as large as 1015 G. With densities a several times larger than than nuclear saturation density and the largest magnetic fields in nature, neutron stars are a unique natural laboratory for investigating these extreme conditions. Questions such as how the magnetic field can influence the inner matter phase will have implications for the EoS and mass/radius ratio of these compact objects; similarly, the field may affect the star cooling and other transport properties of relevance. These and other potential implications of the magnetic field will be discussed by specialists who have contributed fundamental research to this area of physics and astrophysics.

Guest Editors

Prof. Dr. Efrain J. Ferrer
Prof. Dr. Vivian de la Incera
Dr. Cristina Manuel

Deadline for manuscript submissions

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Message from the Editor-in-Chief

The multidisciplinary journal *Universe* is aiming to follow and, hopefully, to lead to the largest extent as possible the ever-self renovating threads which weave mathematical theories with our understanding of the magnificent natural world. On behalf of all the distinguished members of the Advisory and Editorial Boards, I extend my welcome to this journal and look forward to hearing from the interested contributors and learning about their valuable research.

Editor-in-Chief

Prof. Dr. Lorenzo Iorio
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