

Special Issue

Properties and Dynamics of Neutron Stars and Proto-Neutron Stars

Message from the Guest Editors

Based on your expertise, we would like to invite you to submit a contribution to the upcoming Special Issue of *Universe* entitled “Properties and Dynamics of Neutron Stars and Proto-Neutron Stars”. Following new developments in measurements of gravitational waves from neutron-star mergers and modification or construction of particle colliders to reach larger densities, we are entering a new era, in which we can for the first time begin to understand dense and hot matter. This, together with future supernova explosion data, will provide us for the first time with the opportunity to have truly multimessenger data on hot and dense matter, which is to some extent similar to the matter present in the core of proto-neutron stars. This Special Issue focuses on the theory necessary to understand the present data and data to come in the future. It includes state-of-the-art theoretical models that describe dense and hot matter and dynamical stellar simulations that make use of them, with the ultimate goal of determining which degrees of freedom are relevant under these conditions and how they affect the matter equation of state and stellar evolution.

Guest Editors

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Deadline for manuscript submissions

closed (31 March 2022)



Universe

an Open Access Journal
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Impact Factor 2.6
CiteScore 5.2



mdpi.com/si/74877

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About the Journal

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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