





Special Issue Reprint

# Properties and Dynamics of Neutron Stars and Proto-Neutron Stars

www.mdpi.com/books/reprint/6168

Edited by Veronica Dexheimer Rodrigo Negreiros

ISBN 978-3-0365-5399-3 (Hardback) ISBN 978-3-0365-5400-6 (PDF)



Following new developments in the measurement of gravitational waves from neutron–star mergers and the modification or construction of particle colliders to reach larger densities, we are entering a new era, during which we can begin to understand dense and hot matter for the first time. This, together with future supernova explosion data, will provide us 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 present and future data. 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.





MDPI Books offers quality open access book publishing to promote the exchange of ideas and knowledge in a globalized world. MDPI Books encompasses all the benefits of open access – high availability and visibility, as well as wide and rapid dissemination. With MDPI Books, you can complement the digital version of your work with a high quality printed counterpart.



#### **Open Access**

Your scholarly work is accessible worldwide without any restrictions. All authors retain the copyright for their work distributed under the terms of the Creative Commons Attribution License.



#### **Author Focus**

Authors and editors profit from MDPI's over two decades of experience in open access publishing, our customized personal support throughout the entire publication process, and competitive processing charges as well as unique contributor discounts on book purchases.



### **High Quality & Rapid Publication**

MDPI ensures a thorough review for all published items and provides a fast publication procedure. State-of-the-art research and time-sensitive topics are released with a minimum amount of delay.



## **High Visibility**

Due to our global network and well-known channel partners, we ensure maximum visibility and broad dissemination. Title information of books is sent to international indexing databases and archives, such as the Directory of Open Access Books (DOAB), and the Verzeichnis Lieferbarer Bücher (VLB).



## **Print on Demand and Multiple Formats**

MDPI Books are available for purchase and to read online at any time. Our print-on-demand service offers a sustainable, cost-effective and fast way to publish MDPI Books printed versions.

MDPI AG St. Alban-Anlage 66 4052 Basel Switzerland Tel: +41 61 683 77 34 www.mdpi.com/books books@mdpi.com

