



The Structure and Evolution of Stars

Guest Editors:

Prof. Dr. Jorick S. Vink

Armagh Observatory and
Plantearium, Armagh BT65 9DG,
UK

Dr. Dominic Bowman

Institute of Astronomy, KU
Leuven, Leuven, Belgium

Dr. Jennifer Van Saders

IfA, University of Hawaii,
Honolulu, HI, USA

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Message from the Guest Editors

Dear Colleagues,

Accurate stellar evolution modeling is only possible once the correct stellar structures have been constructed. While many papers and books on stellar evolution have been published over the decades, we feel a comprehensive volume describing the physics and state of the art of stellar structures over the stellar mass range is missing.

Stars of different masses and ages have different internal structures. The differences in these structures result in different luminosities, classifications and evolutions. The development of asteroseismology has given us a deeper understanding of the internal structures of stars. In addition, the study of physics such as nuclear reactions and chemicals and angular momentum transport inside stars helps us understand the basic physical properties of stars across the HR diagram.

This topic will focus on the internal structure of stars, especially on the main sequence, which will help understand the evolution of all stages from birth to death as white dwarfs, neutron stars and black holes.





Editors-in-Chief

Dr. Margo Aller

Department of Astronomy,
University of Michigan, Ann
Arbor, MI 48109-1042, USA

Dr. Jose L. Gómez

Instituto de Astrofísica de
Andalucía (IAA-CSIC), Glorieta de
la Astronomía S/N, 18008
Granada, Spain

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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Galaxies Editorial Office
MDPI, St. Alban-Anlage 66
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