

Special Issue

Atomic and Molecular Data Needs for Astronomy and Astrophysics

Message from the Guest Editors

This Special Issue aims to encourage further dialogue and promote knowledge transfer between astronomers with strong atomic and molecular data needs and those who produce this data from laboratory measurements and calculations. We hope this will foster new collaborations for the future, which, through targeted measurements and calculations, will accelerate the rate at which astronomers' needs can be met. Contributions will focus on:

- Data requirements of astronomers
- Laboratory-measured atomic and molecular data
- Theoretical calculations
- Databases

The emphasis of this Special Issue will remain on knowledge transfer; with astronomers highlighting their data needs, and spectroscopists and theorists presenting new data of astronomical interest and the capabilities of their facilities for future collaborations. We encourage all astronomers involved in the ongoing spectroscopic surveys, such as Gaia-ESO, APOGEE or GALAH or in future ones, such as WEAVE, 4MOST or DESI, to contribute in order to explain their data needs. Review papers, as well as shorter contributions are very welcome.

Guest Editors

Dr. Maria Teresa Belmonte

Dr. Carlos Allende-Prieto

Dr. Ulrike Heiter

Prof. Alan Hibbert

Dr. Patrick De Laverny

Deadline for manuscript submissions

closed (1 July 2018)



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About the Journal

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*.

Editors-in-Chief

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