

# Special Issue

## Advanced Atomic Structure and Stark Broadening Calculations for Physical and Astrophysical Applications

### Message from the Guest Editors

This Special Issue will include original and review papers on high precision atomic structure calculations and measurements with most applications in physics and astrophysics. Stark broadening is one of the most important processes in laboratories and astrophysical plasma, so theoretical, experimental and observational research works are welcome. Research areas may include (but not limited to) the following:

- Atomic structure calculations and experiments;
- Fine and hyperfine structure;
- Atomic and plasma spectroscopy;
- Radiative and collisional processes;
- Broadening of spectral lines in plasma;
- Stark widths and shifts calculations;
- Acquisition and analysis of stellar spectra.

Critical evaluation of experimental and theoretical data on energy structure and radiative transitions in atoms and ions and broadening of spectral lines are also welcome in this Special Issue.

### Guest Editors

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### Deadline for manuscript submissions

closed (30 September 2023)

## Atoms

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## About the Journal

### Message from the Editor-in-Chief

The scope of *Atoms* is deliberately wide and encompasses a large part of theoretical and experimental atomic, molecular, nuclear, and chemical physics in order to encourage cross-disciplinary connections, while supporting the more traditional idea of individual subfields. The journal is also interested in papers concerning the computation and compilation of data related to applications in the above areas. Details of experimental methods and codes are welcome. Your research is taken seriously and peer-reviewed with care. I encourage you to contact me or any of the Editorial Board Members for further information.

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### Editor-in-Chief

Prof. Dr. Pascal Quinet

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