# **Special Issue**

# Atomic Processes and Their Role in Astrophysical Phenomena

## Message from the Guest Editor

This Special Issue explores how atomic physics is important to conducting astrophysics research and examines current challenges at the intersection of these two fields. One of the most important quantities generated by atomic processes that is used in astrophysics is opacity. This Special Issue aims to include opacity and its effects on radiation and energy transport, line broadening as diagnostics, how the astrophysical environment modifies atomic structure, populations, and spectra, and how improved atomic data (energy levels and oscillator strengths) becomes essential for detailed spectral analysis. In addition to current research, topical reviews and tutorials will be welcome.

#### **Guest Editor**

Dr. Thomas Gomez

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## Deadline for manuscript submissions

31 January 2026

## **Atoms**

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## 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.

## **Editor-in-Chief**

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