

# Special Issue

## Plasma Physics Highlights: Non-equilibrium Dynamics, Interfaces and Mixing

### Message from the Guest Editor

We propose organizing a Special Issue: 'Plasma Physics Highlights: Non-equilibrium Dynamics, Interfaces and Mixing'. Non-equilibrium dynamics, interfaces and mixing play an important role in plasmas in high and low energy density regimes, at astrophysical and at atomic scales, in nature and technology. Examples include the instabilities and interfacial mixing in supernovae and in inertial confinement fusion, particle–field interactions in magnetic fusion and in imploding Z-pinches, downdrafts in stellar interior and in planetary magneto-convection, plasma thrusters, nanofabrication and magnetic flux ropes and structures in the Solar corona and plasma instabilities in the Earth ionosphere. This Special Issue would provide the opportunity to bring together scientists from different areas of plasma physics. It would serve to promote the exchange of ideas and to motivate the discussions of rigorous theoretical approaches and state-of-the-art numerical simulations along with advanced experimental techniques and technological applications.

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### Guest Editor

Prof. Dr. Snezhana Abarzhi

Faculty of Engineering and Mathematical Sciences, The University of Western Australia, Crawley, WA 6009, Australia

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### Deadline for manuscript submissions

20 June 2025

## 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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