

Special Issue

Neutral Atoms in Controlled Fusion and Space Plasmas

Message from the Guest Editors

Techniques dealing with fluxes of fast neutral particles in plasma are at the frontier of controlled fusion research and space exploration. This Special Issue is dedicated to all aspects of atomic physics, atomic and molecular data, and numerical modeling involved in the development of neutral beam injection (NBI), neutral particle analysis (NPA), and energetic neutral atom (ENA) systems, as well as in theoretical and experimental research work associated with these systems. The purpose is to facilitate the tasks of plasma and nuclear fusion scientists as well as stellar and planetary physicists. Review articles, original research articles, and data tables are welcome, aiming to extend the renowned sources such as “Atomic and Plasma–Material Interaction Data for Fusion” by IAEA, “Atomic Data for Fusion” by ORNL CFADC, and further develop the atomic physics basis for NBI, NPA and ENA. In addition, multidisciplinary papers illustrating the importance of the subject in both plasma physics and astrophysics would be of interest.

Guest Editors

Dr. Pavel Goncharov

Dr. Christian Hill

Dr. Kalle Heinola

Deadline for manuscript submissions

closed (15 August 2023)

Atoms

an Open Access Journal
by MDPI

Impact Factor 1.5
CiteScore 3.1



mdpi.com/si/49026

Atoms
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
atoms@mdpi.com

[mdpi.com/journal/
atoms](https://mdpi.com/journal/atoms)



Atoms

an Open Access Journal
by MDPI

Impact Factor 1.5
CiteScore 3.1



[mdpi.com/journal/
atoms](https://mdpi.com/journal/atoms)



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.

Editor-in-Chief

Prof. Dr. Pascal Quinet

1. Physique Atomique et Astrophysique, Université de Mons, B-7000 Mons, Belgium
2. IPNAS, Université de Liège, B-4000 Liège, Belgium

Author Benefits

Open Access

— free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, ESCI (Web of Science), Astrophysics Data System, Inspec, CAPlus / SciFinder, INSPIRE, and other databases.

Journal Rank:

CiteScore - Q2 (Nuclear and High Energy Physics)