

Special Issue

New Insights into Ultracold Matter

Message from the Guest Editors

The potential to cool matter down to remarkably cold temperatures has opened the door to the discovery of a plethora of phenomena in quantum mechanical platforms that can currently be routinely observed, controlled, and manipulated with unprecedented precision. Furthermore, research on ultracold-matter systems displays an incredible theoretical–experimental synergy that pushes forward our understanding of the quantum world. In this Special Issue, we welcome original and review articles at the forefront of ultracold-matter research from both the theoretical and experimental side. Examples of topics include, but are not limited to, quantum mixtures, supersolidity, dipolar interactions, spin–orbit coupling, solitons, vortices, and superfluid turbulence. We also encourage the submission of manuscripts on the subjects of quantum magnetism, Rydberg atoms, polarons, exciton–polaritons, artificial gauge fields, many-body localization, and ultracold-matter-based quantum technologies, such as atomtronic devices. For more details: <https://www.mdpi.com/si/192906>

Guest Editors

Dr. Andrea Richaud

Dr. Albert Gallemí

Dr. Juan Polo

Deadline for manuscript submissions

closed (30 September 2024)

Atoms

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[mdpi.com/si/192906](https://www.mdpi.com/si/192906)

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

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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.

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

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