

Special Issue

Complexity in High Energy and Statistical Physics

Message from the Guest Editors

The *Complexity in High Energy and Statistical Physics* Workshop (<https://sites.usp.br/chesp/>) will be held in Erice, Italy, on 1–7 December 2024. It will enable scientists from all over the world to present their latest research in high energy and statistical physics, receive direct feedback, and engage in discussions with the wider scientific community. We are honored to serve as of this Special Issue in *Physics*, which will contain a selection of papers both submitted to and accepted for this workshop. We warmly invite researchers to submit their contributions to this Special Issue. The topics include, but are not limited to, the following:

- Nonadditive entropies—foundation, application, and complex systems;
- Scale-free systems and networks;
- (Multi)fractals, self-similar systems;
- Renormalization group of quantum field theory;
- Electromagnetic plasma;
- The bootstrap approach to quantum field theory;
- Nonextensive statistics and transport processes;
- Nonextensive statistics in cosmology;
- Perspectives in particle and nuclear physics.

All relevant research and review articles, including those beyond the Workshop, are welcome.

Guest Editors

Dr. Airton Deppman

Dr. Magno Valério Trindade Machado

Dr. Roman Pasechnik

Prof. Dr. Edward Sarkisyan-Grinbaum

Prof. Dr. Vyacheslav Yukalov

Deadline for manuscript submissions

closed (30 September 2025)



Physics

an Open Access Journal
by MDPI

Impact Factor 1.8
CiteScore 3.1



mdpi.com/si/198703

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

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





Physics

an Open Access Journal
by MDPI

Impact Factor 1.8
CiteScore 3.1



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



About the Journal

Message from the Editor-in-Chief

Physics plays a crucial role in our understanding of the world and is of huge significance for the development of other sciences. This ensures that physics is always attracting heightened attention and is at the center of human interest. *Physics* is devoted to all aspects of physics and looks into news and progress of modern physics, seeking new horizons and future discoveries. The journal aims to provide an advanced forum for discussion of contemporary problems in physics and its development.

Editor-in-Chief

Prof. Dr. Edward Sarkisyan-Grinbaum

1. Experimental Physics Department, CERN, 1211 Geneva 23,
Switzerland

2. Department of Physics, The University of Texas at Arlington,
Arlington, TX 76019, USA

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), Inspec, INSPIRE, Astrophysics Data System, and other databases.

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 25.9 days after submission; acceptance to publication is undertaken in 20.7 days (median values for papers published in this journal in the first half of 2025).