

Special Issue

Quantum Field Theory, 2nd Edition

Message from the Guest Editor

One of the second Special Issue's focuses is the investigation of implications of an analytical approach to 4D Euclidean Yang–Mills thermodynamics (gauge groups $SU(2)$ and $SU(3)$) developed by the editor and his collaborators. In particular, we encourage contributions that discuss the temperature dependence of ultralight Planck-scale axions by referring to matrix models on the spectrum of the Dirac operator, direct or indirect lattice computations or effective chiral field-theory techniques. We welcome numerical investigations of self-gravitating axion lumps (fuzzy dark matter) for a single axion species and/or several components either treated entirely by the Poisson–Schrödinger system or partly in terms of classical N-body components. Here, it is also highly interesting to include relativistic corrections to study the potential onset of collapse. Emulator-based and effective field theoretic approaches to the non-linear growth of small-scale structure are important tools to learn about the nature of dark matter, and we welcome submissions in this field, [...] For further reading, please follow the [link](#) to the Special Issue Website.

Guest Editor

Dr. Ralf Hofmann

Theoretical High Energy Physics, University of Heidelberg, Heidelberg, Germany

Deadline for manuscript submissions

closed (28 February 2025)



Universe

an Open Access Journal
by MDPI

Impact Factor 2.6
CiteScore 5.2



mdpi.com/si/168972

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

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





Universe

an Open Access Journal
by MDPI

Impact Factor 2.6
CiteScore 5.2



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



About the Journal

Message from the Editor-in-Chief

The multidisciplinary journal *Universe* is aiming to follow and, hopefully, to lead to the largest extent as possible the ever-self renovating threads which weave mathematical theories with our understanding of the magnificent natural world. On behalf of all the distinguished members of the Advisory and Editorial Boards, I extend my welcome to this journal and look forward to hearing from the interested contributors and learning about their valuable research.

Editor-in-Chief

Prof. Dr. Lorenzo Iorio
Ministero dell' Istruzione e del Merito, Viale Unità di Italia 68, 70125 Bari,
Italy

Author Benefits

Open Access:

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

High Visibility:

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

Journal Rank:

JCR - Q2 (Astronomy and Astrophysics) / CiteScore - Q2 (General Physics and Astronomy)