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Quantum Field Theory, 2nd Edition

Guest Editor:

Dr. Ralf Hofmann

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

Deadline for manuscript
submissions:

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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.



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Special Issue



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Editor-in-Chief

Prof. Dr. Lorenzo Iorio

Ministero dell'Istruzione e del
Merito, Viale Unità di Italia 68,
70125 Bari, BA, Italy

Message from the Editor-in-Chief

The multidisciplinary *Universe* journal 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 editorial board, I extend my welcome to this new journal and look forward to hearing from the interested contributors and learning about their valuable research.

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Contact Us

Universe Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/universe
universe@mdpi.com
X@Universe_MDPI