



an Open Access Journal by MDPI

Cosmoparticle Physics in the Light of Andrei D. Sakharov's Legacy

Guest Editor:

Prof. Dr. Maxim Y. Khlopov

 President and Full Professor, Center for Cosmoparticle Physics
"Cosmion", National Research Nuclear University "Moscow
Engineering Physics Institute", Moscow, Russia
Virtual Institute of Astroparticle Physics, 75018 Paris, France
Principal Researcher, Institute of Physics, Southern Federal University, Rostov on Don, Russia

Deadline for manuscript submissions: closed (31 December 2021)

Message from the Guest Editor

We comemorate in 2021 100th Anniversary of Andrei D. Sakahrov and UNESCO has nominated this year as the A.D. Sakharov year to celebrate his many achievement. "Cosmoparticle Physics as Cross-Disciplinary Science" is the last in the long list of Sakharov's publications, and thus, studies of the fundamental relationship of cosmology and particle physics continue his scientific legacy. Sakharov conditions in baryosynthesis, Sakharov oscillations in CMB or Sakharov enhancement in dark matter annihilation are only few examples of the great legacy of A.D. Sakharov in the modern theory of the Universe. This Special Issue aims to discuss the state-of-the-art in the development of Sakharov's legacy in studies of the mutual relationship of the basis of modern particle physics and cosmology, as well as the nontrivial features of its indirect physical, cosmological, and astrophysical probes. Such features involve but are not reduced to models of the very early Universe and their observational signatures, physics of dark matter and its direct and indirect probes, as well as to a wide range of models beyond the standard models of particle physics and cosmology and their effects.









an Open Access Journal by MDPI

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.

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*)

Contact Us

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