



Editorial **Embracing New Frontiers with** *Physics and the Cosmos*

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The birth of *Physics and the Cosmos (PaC)*, a brand-new journal devoted to astrophysics as well as the profound and rapidly evolving interfaces between astrophysics, fundamental physics, and frontier technology, is exciting news and an excellent opportunity for science.

Why launch another journal specifically devoted to astrophysics? At the core of our mission lies the recognition that astronomy and fundamental physics share deep, interwoven roots that have never been more relevant. With the advancement of observational technologies, and as large scientific projects expand the boundaries of what we know, astrophysics is entering an unprecedented era where instrumentation, computational methods, and theoretical insight coalesce. Thus, our field needs vibrant hubs where these dynamic energies converge, and we propose that *Physics and the Cosmos* be such a hub, shining a spotlight on the interplay between fundamental physics and astronomy, a partnership that has often pioneered scientific revolutions.

It is a privilege to have *Physics and the Cosmos* backed by Scilight Press, headquartered in Melbourne, Australia—an academic publishing house dedicated to open-access dissemination of high-quality research. With solid support from esteemed institutions including the Academia Europaea, the International Eurasian Academy of Sciences, and the Chinese Academy of Engineering, Scilight Press exemplifies a commitment to scholarly excellence and global collaboration. This strong foundation gives our new journal a robust platform from which to grow, and it also reassures our community that the highest standards in editorial integrity, peer review, and publication ethics will be firmly upheld.

Physics and the Cosmos is a gold open-access, peer-reviewed journal, publishing quarterly in an online format. By eliminating barriers to access, we aim to ensure that important breakthroughs, intriguing hypotheses, and fresh data analyses are immediately available to researchers, students, and interested readers worldwide. In an era characterized by exponential growth of data and the rapid transformation of observational capabilities, such accessibility promotes cross-pollination of ideas and fosters the type of collaboration that can accelerate meaningful discoveries.

The scope of our journal reflects a comprehensive range of subjects that mirrors the breadth of modern astrophysics. Topics include, but are not limited to, cosmology and the early universe; galaxy formation and evolution; star formation and stellar dynamics; the nature of the interstellar and intergalactic spaces and of magnetic field in the universe; as well as black holes, neutron stars, and other exotic compact objects. We also address the emerging fields of gravitational-wave, neutrino, and multi-messenger astronomy, and the compelling mysteries of dark matter and dark energy. Instrument development, observational methodologies, computational approaches, and data analysis techniques represent additional pillars that drive progress in our discipline. We believe that by uniting these areas within a single, accessible forum, *Physics and the Cosmos* can become an influential voice in the global astrophysical dialogue.

To champion the highest scholarly standards, *Physics and the Cosmos* is gathering an editorial board comprising leading experts in a diverse set of astrophysical subfields. Their collective mastery, informed by broad experience in both theoretical and observational realms, will guide our journal's content and help to ensure that every article meets the stringent criteria expected by the academic community. From original research papers and review articles to perspectives and incisive technical analyses, our editorial board stands ready to nurture scholarship that advances the field in measurable and meaningful ways.

In addition to our regular publications, we have embraced a vision for shaping and guiding specialized dialogues by introducing Featured Topic Collections on a periodic basis, on topics proposed by the Editorial



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Board—but suggestions by the readers will be evaluated. These thematic collections will provide valuable opportunities to showcase cutting-edge research around emerging, often interdisciplinary, trends in astrophysics, such as the synergies in multi-messenger observational campaigns, or the increasingly significant role of machine learning in analyzing astronomical datasets. Scholars with expertise in these focused areas will be invited to propose lines of research and submit contributions that illuminate new breakthroughs or provoke fruitful debates, further strengthening the journal's role as a catalyst for scientific progress. We also plan to feature white books, especially those addressing upcoming initiatives or proposals pivotal to shaping the future of astrophysics research and exploration.

The heart of any journal lies in the quality of its published scholarship. Therefore, *Physics and the Cosmos* aim to expedite a professional, rigorous peer-review process that respects both authors and reviewers. We recognize that timeliness is vital; by delivering efficient decision timelines and thorough feedback, we strive to facilitate the swift circulation of knowledge. This carefully balanced approach will help researchers worldwide keep abreast of new developments and ensure that groundbreaking ideas and data analyses reach the community without undue delay.

We encourage you to submit your latest research, reviews, or perspectives, and to engage with White Books for the innovative research you want to propose. Whether you are an established expert or an emerging scholar, we wish to offer you a welcoming platform for sharing insights and discoveries that may ultimately reshape our perception of the universe. Hand in hand with our publisher, our editorial board, and the many contributors who will bring their knowledge to these pages, we invite you to participate in building a journal as dynamic, luminous, and far-reaching as the cosmos itself.

By uniting a diverse, international community dedicated to exploration, *Physics and the Cosmos* can make a lasting, transformative impact. We look forward to welcoming your contributions and forging partnerships that can usher in new chapters of discovery for astrophysics. Let us embrace this endeavor together, inspired by an age-old quest to probe the fundamental laws that govern the Universe. The cosmos awaits our curiosity; let us answer its call with renewed vigor and a shared spirit of scientific wonder.

Conflicts of Interest

The author declares no conflict of interest.