Editorial on the New Scope of *Dynamics*

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We are thrilled to introduce the new scope of the *Dynamics*, a platform that will unravel the captivating world of diverse dynamics and their multifaceted applications. With an ever-evolving landscape in the realm of science and technology, it is essential to provide a comprehensive space for researchers and scholars to explore, contribute, and foster innovation across a wide spectrum of disciplines. The new horizon of *Dynamics* is designed to do just that.

Our journal aims to embrace a wide variety of topics that delve into the intricate dynamical phenomena associated with physics. From the fluid flows that sculpt our environment to the celestial mechanics orchestrating the dance of planets, this journal is set to become a hub for unveiling the secrets of our physical world. The topics covered in this journal have been thoughtfully curated to encompass the forefront of scientific endeavors, creating a nexus where expertise converges, and cutting-edge research finds its voice.

Aerodynamics, fluid dynamics, and gas dynamics will shed light on the mechanics of motion in gases and liquids [1], paving the way for advancements in aerospace [2–4], transportation, and environmental studies. Meanwhile, analytical dynamics will lay the foundation for understanding the fundamental principles that govern systems ranging from microscopic particles to celestial bodies [5].

In a rapidly evolving world, the study of complex systems and complexity will unravel the intricacies of interconnected phenomena, yielding insights into phenomena as diverse as biological networks, socio-economic dynamics, and ecological interactions [6]. At the same time, chaos and nonlinear dynamics will illuminate the hidden patterns underlying seemingly “random” behavior, enabling breakthroughs in diverse fields including weather forecasting, financial markets, engineering, and brain dynamics [7,8].

*Dynamics* is equally poised to explore the frontiers of quantum mechanics, electrodynamics, and relativistic dynamics, enriching our comprehension of the quantum realm and the fabric of space–time [9,10]. Additionally, the realms of molecular systems, structural dynamics, and electronic dynamics will offer glimpses into the very building blocks of matter and materials [11].

The interplay between micro and macro scales will be illuminated through multi-scale/multi-physics dynamics, a field with far-reaching implications for engineering, materials science, and biological studies [12]. On the frontier of thermodynamics, new perspectives will emerge, influencing the design of energy-efficient systems and the understanding of the universe’s underlying laws [13].

Topics that the journal of *Dynamics* covers are presented below in alphabetical order.

- Aerodynamics;
- Analytical dynamics;
- Biological physics and networks;
- Celestial mechanics;
- Chaos, nonlinear dynamics, and applications;
- Complex systems and complexity;
- Dynamics of atomic and molecular systems;
- Electronic and structural dynamics;
• Fluid dynamics;
• Fractional dynamics and applications;
• Gas dynamics;
• Multi-scale/multi-physics dynamics;
• Quantum mechanics and electrodynamics;
• Relativistic dynamics;
• Stability, control, and synchronization;
• Thermodynamics;
• Vortex dynamics.

The journey into the new scope of *Dynamics* promises to be a thrilling expedition, guided by a community of researchers who are pioneers in their respective domains. As we embark on this dynamic adventure together, we invite you to contribute, engage, and innovate within this exciting realm. Our aim is to create a forum where scientists from diverse disciplines can converge to unravel the mysteries of our world and shape the course of scientific progress.

Therefore, contributions from the aforementioned subjects related to the dynamics of physical processes will be accepted as original papers, technical notes, discussions, and responses in the regular issues. Additionally, researchers and research teams from these fields are encouraged to submit proposals for Special Issues on selected research areas related to important dynamics topics.

With all the editorial board members, MDPI, carefully selected reviewers, and researchers who work in this field from all around the world, we wish a great success to *Dynamics*.

**Conflicts of Interest:** The author declares no conflict of interest.

**References**


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