

Special Issue

Advanced Mathematical Methods for Networked System Control and Synchronization

Message from the Guest Editors

This Special Issue, titled "Advanced Mathematical Methods for Networked System Control and Synchronization", will investigate the latest mathematical techniques aimed at enhancing the control and synchronization of complex, interconnected systems. It covers a broad range of topics, ranging from stability and controllability in dynamic networks to synchronization across various systems, including cyber-physical and biological networks. Practical applications will also be explored in areas such as power grids, autonomous vehicles, communication networks, robotic swarms, sensor networks, and distributed computing systems, aiming to solve real-world challenges related to robustness, adaptability, and scalability. Contributions focus on mathematical tools like differential equations, Lyapunov functions, consensus algorithms, optimization algorithms, graph theory, game theory, and nonlinear control theory to ensure the efficient, reliable, and synchronized operation of interconnected systems across diverse domains.

Guest Editors

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Deadline for manuscript submissions

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Message from the Editor-in-Chief

The journal *Mathematics* publishes high-quality, refereed papers that treat both pure and applied mathematics. The journal highlights articles devoted to the mathematical treatment of questions arising in physics, chemistry, biology, statistics, finance, computer science, engineering and sociology, particularly those that stress analytical/algebraic aspects and novel problems and their solutions. One of the missions of the journal is to serve mathematicians and scientists through the prompt publication of significant advances in any branch of science and technology, and to provide a forum for the discussion of new scientific developments.

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