Special Issue

Mathematical Modeling and Simulation in Automatic Control

Message from the Guest Editors

With the increase in these applications and the high degree of automation technology integration, simulation has become an important role in automatic control system design. New modeling, simulation, and control techniques are needed to meet the challenges of automatic control. It remains an important and challenging problem to be solved in a theoretical and practical way. In this context, we invite the submission of high-quality novel contributions related to mathematical modeling and the simulation of complex dynamical systems, development of new control algorithms, new mathematical tools applied to control systems, and real-time applications of control systems. Topics of interest include, but are not limited to, the following: mathematical modeling of dynamical systems; linear parameter-varying systems; developing theories in linear control, nonlinear control, or fault-tolerant control; system identification of complex systems, simulation, and control of complex systems; controllers' tunning methods based on metaheuristic algorithms. Contributions of both theoretical and practical research are welcome.

Guest Editors

Prof. Dr. Felipe D.J. Sorcia-Vázquez

Prof. Dr. Jesse Yoe Rumbo-Morales

Prof. Dr. Gerardo Ortiz-Torres

Deadline for manuscript submissions

closed (30 April 2025)

About the Journal

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.

Editor-in-Chief

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