Advances in Pure Mathematics



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Special Issue on Control, Optimization and Modeling

Call for Papers

Control, Optimization and Modeling is an academic field that focuses on developing mathematical models and algorithms to optimize and control complex systems. It involves designing control strategies and algorithms to shape the behavior of a system, while also employing optimization techniques to find the best possible solution within given constraints. Modeling provides a mathematical representation of the system being studied and allows for understanding its behavior and making predictions. Control theory encompasses concepts like stability analysis, system identification, and optimal control, while optimization techniques involve mathematical programming, heuristic methods, and evolutionary optimization. This field finds applications in various domains, including engineering, economics, robotics, and transportation, to improve system performance and efficiency. Overall, Control, Optimization, and Modeling aim to design effective control strategies, explore optimal solutions, and gain insights into the behavior of complex systems.

In this special issue, we intend to invite front-line researchers and authors to submit original research and review articles on **Control, Optimization and Modeling**. Potential topics include, but are not limited to:

- Control theory
- Control strategies and algorithms
- Mathematical programming
- Optimization techniques
- Optimization based design and control
- Dynamic optimization and control
- Topology optimization and optimal control
- Stochastic optimal control
- System identification
- Model predictive control
- Robust control
- Mathematical or computational models and simulation
- Multi-objective optimization
- Machine learning for control
- Control and complex systems

Authors should read over the journal's <u>For Authors</u> carefully before submission. Prospective authors should submit an electronic copy of their complete manuscript through the journal's <u>Paper Submission System</u>.

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Please kindly notice that the "**Special Issue**" under your manuscript title is supposed to be specified and the research field "**Special Issue** – *Control*, *Optimization and Modeling*" should be chosen during your submission.

According to the following timetable:

Submission Deadline	December 28th, 2023
Publication Date	February 2024

For publishing inquiries, please feel free to contact the Editorial Assistant at scirp.org

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