

## Special Issue

# Mathematical Methods for Fault Diagnosis and Fault-Tolerant Control Systems

### Message from the Guest Editors

Fault diagnosis and fault-tolerant control systems (FDFTCS) are widely used to enhance the reliability and fault-tolerant capability of practical systems, including power systems, transportation systems, chemical industry systems and other safety-critical systems. Over the last decade, complex mathematical methods have made great contributions to the development of these systems and solid theoretical foundations and fruitful results have been reported in relation to FDFTCS technologies. We invite prospective authors to submit their contributions for fruitful interdisciplinary cooperation and the exchange of new ideas and experiences. Potential topics include, but are not limited to:

- Mathematics-driven static fault diagnosis approaches
- Observer-based fault diagnosis framework: model-based designs
- Knowledge-based fault diagnosis
- Passive and active fault-tolerant control method
- Mathematical models in prognostic and health management
- Sensors and soft sensors for supervision and control
- Mathematics-driven intelligent methods for fault-tolerant control

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### Guest Editors

Prof. Dr. Junqi Xu

Dr. Fei Ni

Dr. Yougang Sun

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### Deadline for manuscript submissions

closed (30 September 2024)



## Mathematics

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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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### Editor-in-Chief

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