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Mathematical Methods for Fault Diagnosis and Fault-Tolerant Control Systems

Guest Editors:

Prof. Dr. Junai Xu

National Maglev Transportation Engineering R&D Center, Tongji University, Shanghai 201804, China

Dr. Fei Ni

National Maglev Transportation Engineering R&D Center, Tongji University, Shanghai 201804, China

Dr. Yougang Sun

Institute of Rail Transit, Tongji University, Shanghai 201804, China

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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: modelbased 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 faulttolerant control



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Editor-in-Chief

Prof. Dr. Francisco Chiclana

School of Computer Science and Informatics, De Montfort University, The Gateway, Leicester LE1 9BH, UK

Message from the Editor-in-Chief

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