



Mathematical Problems in Engineering

Special Issue on **Analysis and Synthesis of Stochastic Nonlinear Systems**

CALL FOR PAPERS

Ever since the emergence of stochastic stabilization theory in the 1960s, progress has been plagued by a fundamental technical obstacle in the Lyapunov analysis. The stochastic dynamical system is a dynamical system subjected to the effects of noise. Such effects of fluctuations have been of interest for a long time. Nowadays, researches on stochastic nonlinear systems have received significant attention due to the wide applications in various fields such as physics, technology, and life sciences. Therefore, the analysis and synthesis of stochastic nonlinear systems play important roles in many practical systems.

The aim of this special issue is to bring together the latest/innovative knowledge and analysis and synthesis of stochastic nonlinear systems. All the submissions are expected to have original ideas and new approaches. We invite authors to contribute original research articles related to all aspects of this special issue.

Potential topics include, but are not limited to:

- ▶ Stochastic disturbance attenuation
- ▶ Stochastic nonlinear systems
- ▶ Neural networks
- ▶ Complex systems
- ▶ Stability analysis robustness
- ▶ Synchronization and control with incomplete information

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Lead Guest Editor

Shouming Zhong, University of Electronic Science and Technology of China, Chengdu, China
zhongsm@uestc.edu.cn

Guest Editors

Jun Cheng, University of Electronic Science and Technology of China, Chengdu, China
jcheng6819@126.com

Jiuwen Cao, Hangzhou Dianzi University, Hangzhou, China
jwcao@hdu.edu.cn

Pagavathigounder Balasubramaniam, Gandhigram Rural University, Tamilnadu, India
balugru@gmail.com

Haibo Du, The University of Texas at San Antonio, San Antonio, USA
haibo.du.seu@gmail.com

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