



## Science China Information Sciences (SCIS) Call For Papers: Special Focus on the Entanglement of Control and Optimization

Control and optimization are two topics that are both started from the earliest stages of human civilization, systematically developed based on rigorous mathematical tools, and today recognized to be central components of many enabling techniques. There have always been strong interactions between the two areas. The perspectives of dynamics and feedback from control theory have been used for the analysis of optimization algorithms, and optimization methods are promising for the performance improvement of control systems. The recent development of new systems with growing performance capabilities is calling for an expanded and deepened understanding of the interplay of control and optimization.

This Special Focus solicits articles that look at problems at the interface of control and optimization and address topics within its scope including, but not limited to, the following:

- Data-driven feedback optimization over networks;
- Data-driven and learning-based optimal control;
- Control-theoretical development of optimization algorithms;
- Optimization-by-control methods for network systems;
- Optimization-based control of large-scale dynamical networks;
- Real-time control and optimization for autonomous systems;
- Mathematical methods for control-based optimization or optimization-based control.

### Submission

The papers should be edited in the SCIS template, and submitted online through the manuscript submission system of the *SCIENCE CHINA Information Sciences*:

<https://mc03.manuscriptcentral.com/scis>.

You should choose **Special Focus on the Entanglement of Control and Optimization**.

Information and guidelines on preparation of manuscripts are available on the journal website: <http://scis.scichina.com>.

### Important Dates

- Submission deadline: May 1, 2022
- Acceptance notification: Aug. 15, 2022
- Final manuscripts due: Oct. 15, 2022
- Publication: Feb. 1, 2023

### Guest Editors

**Tengfei LIU**  
Northeastern University, China  
[tfliu@mail.neu.edu.cn](mailto:tfliu@mail.neu.edu.cn)

**Zhong-Ping JIANG**  
New York University, USA  
[zjiang@nyu.edu](mailto:zjiang@nyu.edu)

### Contact

**Kai JIANG**  
Scientific Editor of SCIS  
[jiangkai@scichina.org](mailto:jiangkai@scichina.org)  
010-64015683