**Subject:** Invited Session Proposal for The 4th International Conference on Data-driven Optimization of Complex Systems (DOCS’ 2022)

**Proposed Session Name: Distributed Data-Driven Control and Optimization for Smart ‘Secure Transportation--Zero Carbon Energy--Polymorphic Information’ System.**

Under the guidance of the great goal of carbon peak and carbon neutralization, the key to promoting the new modernization of infrastructure system is to achieve the coordinated and integrated development of transportation, energy and information networks featured by safety-zero carbon -polymorphic.

In the integration of three networks, safe transportation-zero carbon energy-polymorphic information, there are many problems of distributed cooperative control, optimal dispatch and safety management, many of which are data-driven research problems, attracting extensive attention of experts in related fields. As a result, we strongly hope to propose an invited session for DOCS 2022 entitled ‘**Distributed data-driven control and optimization for smart ‘secure transportation-zero carbon energy-polymorphic information’ system’**. This special session is aiming to provide an opportunity for the researchers and practitioners in the field of **MASs(multi-agent systems), security analysis, data-driven control and distributed optimization** to share their new ideas and recent results. The topics of this session explicitly include but are not limited to the following aspects:

* Standard modeling and analysis techniques by data-driven methods for ‘Secure transportation-zero carbon energy-polymorphic information’ system;
* Applications of advanced data-driven control and modern big data techniques in the control and optimization of secure transportation and zero-carbon energy system;
* Advanced polymorphic information technologies and relative methods for secure transportation and zero-carbon energy system and other smart engineering;
* Advanced distributed control techniques for MASs, and their applications on secure transportation and zero-carbon energy system and other smart engineering;
* Relative theories and methods supporting ‘Secure transportation-zero carbon energy-polymorphic information’ system.

Yours sincerely，

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**Organizers:**

Session Chair: Qihe Shan

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