

**Subject: Invited Session Proposal forSPAC2021**

**Proposed Session Name: Approximation Based Control and Optimization of Nonlinear Systems**

Recent years have witnessed the growing interests in the control and optimization of complex nonlinear systems since most practical systems are inherently nonlinear. Approximation based intelligent control, such as neural network, fuzzy logic, support vector machine, etc, have been found to be particularly useful for the control and optimization of complex nonlinear dynamic systems. The intelligent control is viewed as an effective tool to improve the control system performance. As a result, we strongly hope to propose an invited session for ICSPAC 2021 entitled ` **Approximation Based Control and Optimization of Nonlinear Systems**'. This special session is aiming to provide an opportunity for the researchers and practitioners in the field of **intelligent control, optimal control and complex systems** to share their new ideas and recent results. The topics of this session explicitly include but are not limited to the following aspects:

- ◆ Approximation based control (e.g., neural network control, fuzzy control) of nonlinear systems
- ◆ Approximation based fault detection and control in nonlinear systems
- ◆ Approximation based optimal control of nonlinear systems in various forms
- ◆ Approximation based optimal control of nonlinear systems with various constraints

Yours sincerely,

Huanqing Wang, Bohai University, China

**Organizers:**

Session Chair: Huanqing Wang