



**IFAC LSS 2019**

**15<sup>th</sup> IFAC Symposium on Large Scale Complex Systems  
(LSS 2019)**

**Delft, The Netherlands, May 26-28, 2019**

<https://www.dcsc.tudelft.nl/LSS19>

**Important dates**

**Paper submission deadline:** February 3, 2019

**Notice of acceptance:** March 1, 2019

**Final version due:** April 15, 2019

**Scope:** The 15th IFAC Symposium on Large Scale Complex Systems: Theory and Applications (IFAC LSS 2019) is a core triennial event of IFAC Technical Committee on Large Scale Complex Systems. The Symposium is to discuss new developments in methodologies and techniques useful in handling complexity in analysis, modelling, control and optimization of large-scale complex systems. The methodologies and tools for the complexity analysis are to be among the key issues of the Symposium. A number of application areas will be addressed. Special attention will be paid to large-scale complex systems that are closely connected with smart industry and technology-enhanced daily lives, such as robotic and automated processes, urban traffic systems, autonomous systems, water systems, environmental systems, power supply systems, complex bio-medical processes and other emerging topics.

**Plenary speakers:**

***Giancarlo Ferrari Trecate***



Giancarlo Ferrari Trecate received the Ph.D. degree in Electronic and Computer Engineering from the Università degli Studi di Pavia in 1999. Since September 2016 he is Professor at EPFL, Lausanne, Switzerland. In spring 1998, he was a Visiting Researcher at the Neural Computing Research Group, University of Birmingham, UK. In fall 1998, he joined as a Postdoctoral Fellow the Automatic Control Laboratory, ETH, Zurich, Switzerland. He was appointed Oberassistent at ETH, in 2000. In 2002, he joined INRIA, Rocquencourt, France, as a Research Fellow. From March to October 2005, he was researcher at the Politecnico di Milano, Italy. From 2005 to August 2016, he was Associate Professor at the Dipartimento di Ingegneria Industriale e dell'Informazione of the Università degli Studi di Pavia. His research interests include scalable control, microgrids, networked control systems, hybrid systems and machine learning. Giancarlo Ferrari Trecate was the recipient of the Researcher Mobility Grant from the Italian Ministry of Education, University and Research in 2005. He is currently a member of the IFAC Technical Committees on Control Design and Optimal Control, and the Technical Committee on Systems Biology of the IEEE SMC society. He is Editor at large for the 2019 ACC and has been serving on the editorial board of *Automatica* (for three terms) and *Nonlinear Analysis: Hybrid Systems*.

***Jacquelin M. A. Scherpen***



Jacquelin M. A. Scherpen received her M.Sc. and Ph.D. degrees in applied mathematics from the University of Twente, Enschede, The Netherlands, in 1990 and 1994, respectively. She was with Delft University of Technology, The Netherlands, from 1994 to 2006. Since September 2006, she is a professor at the University of Groningen, at the Engineering and Technology institute Groningen (ENTEG) of the Faculty of Science and Engineering The Netherlands. From 2013 to 2019 she is the scientific director of ENTEG. She is a member of the Jan C. Willems Center for Systems and Control of the University of Groningen, and board member of the Dutch Institute of Systems and Control. She has held visiting research positions at the University of Tokyo, and Kyoto University, Japan, Université de Compiègne, and SUPELEC, Gif-sur-Yvette, France, and the Old Dominion University, Norfolk, VA, USA. She has been an Associate Editor of the *IEEE Transactions on Automatic Control*, the *International Journal of Robust and Nonlinear Control (IJRNC)* and the *IMA Journal of Mathematical Control and Information*. She is on the editorial board of the *IJRNC*. Her current research interests include model reduction methods for control of networks and nonlinear systems, nonlinear control methods, modeling and control of physical systems using the concepts of passivity and dissipativity, and distributed optimal control applications for smart energy systems.

**Topics:** The scope of the Symposium will cover, but is not limited to

- Modern manufacturing systems
- Traffic systems
- Electric power systems
- Water systems
- Complex bio-medical systems
- Cyber-physical systems
- Autonomous systems
- Decentralized and cooperative control/estimation
- Distributed optimization
- Big data and security
- Wireless sensing and control systems
- Game theory for large-scale systems
- Other emerging topics in large-scale complex system

**Information for authors:** Authors are invited to submit *invited session proposals* and/or *full draft papers* electronically through the submission web-site <http://ifac.papercept.net> by January 1, 2019. All submissions must follow the **IFAC** conference format. Only PDF files complying with the IFAC style rules and PDF requirements are admissible. Detailed formatting instructions will be available at the event website <https://www.dsc.tudelft.nl/LSS19>. The maximum number of pages of a full paper is limited to six (6), including figures.

**Venue:** The Symposium will be hosted in Delft, a canal-ringed city of more than 750 years of history in the western Netherlands that is part of the Rotterdam-The Hague metropolitan area. It has long been a center of art and science. TU Delft was founded here in 1842 by King William II. Delft is known as the manufacturing base for Delftware, hand-painted blue-and-white pottery. In its old town, the medieval Oude Kerk is the burial site of native son and Dutch Master painter Johannes Vermeer. Once the seat of the royal House of Orange, the 15th-century Nieuwe Kerk houses the family's tombs and overlooks Delft's lively market square.

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