

INVITATION

The Organizing Committee is pleased to invite you to participate in the fourth IFAC Conference on Analysis and Control of Chaotic Systems (IFAC Chaos 2015) to be held from August 26 to 28, 2015 in Tokyo, Japan.

The IFAC Chaos meeting started in Reims (France, 2006) and since then has been successfully held in London (The United Kingdom, 2009) and Cancun (Mexico, 2012). IFAC Chaos 2015 will continue this series in Tokyo, Japan

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IMPORTANT DATES

December 30, 2014: Deadline for invited session proposal

January 20, 2015: Deadline for all contributed papers

April 20, 2015: Notification of acceptance/rejection

June 30, 2015: Final manuscript submission
deadline

August 26-28, 2015: Conference dates

LOCATION & CONFERENCE VENUE

The 4th IFAC Conference on Analysis and Control of Chaotic Systems (IFAC CHAOS 2015) will be held in Tokyo, Japan. Tokyo is a world-renowned metropolis and the center of Japan's economy, politics, and culture.

The conference will take place on the Minami-osawa campus of Tokyo Metropolitan University. The Minami-osawa campus is the main campus of Tokyo Metropolitan University and is located in the Tama area.



CONFERENCE SECRETARIAT

IFAC CHAOS 2015
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International Federation of Automatic Control

FIRST ANNOUNCEMENT & CALL FOR PAPERS



4th IFAC Conference on Analysis and Control of Chaotic Systems

CHAOS 2015

August 26-28, 2015

Tokyo, Japan

<http://ctrl.mech.se.tmu.ac.jp/chaos2015>

AIMS & SCOPE

This conference is the fourth IFAC meeting related to analysis and control of chaotic systems. It will provide a forum for the presentation of new developments in the important interdisciplinary field of chaos control, synchronization and complex networks. The research activity in this field is driven by the needs of different application domains such as: biology (brain dynamics, heart beating, etc.), physics (optics, magnetism, fluid dynamics, etc.), mechanics, engineering (non-linear dynamics of electronic and power electronic systems, chaos encrypted signals, walking robots, etc.), economics (critical decision, etc.), chemical engineering, and so on. The aim of the conference is to provide the communities of control engineering, physics, economics, biology, fluid dynamics, power electronics, electronic circuits, etc. with an opportunity to exchange information and new ideas and to discuss new developments in the field of chaos control and synchronization. Both theory and applications will be discussed.

TOPICS

The conference will cover all topics related to chaos and synchronization within the framework of control systems theory and engineering, including (but not limited to) the following.

- Recent advances in control and anti-control of chaotic/complex systems.
- Recent advances in synchronization (and observer design) for chaotic/complex systems.
- Analysis of stability, controllability and observability of chaotic/complex systems.
- Bifurcations in chaotic/complex systems.
- New applications in chaos control, chaos-encrypted signals, optical systems, biological systems, power converters, economic systems, etc.
- Nonlinear dynamics of electronic systems.
- Nonlinear time series and identification.
- Hybrid systems and chaos, grazing bifurcations.
- Limit cycles in networks of oscillators.

- Kinematics models of groups of self-propelled particles.
- Synchronization of delay systems, chaotic delay systems.
- Brain dynamics.
- Small world networks.
- Synchronization in biology.
- Chaos/bifurcation control in chemical engineering.
- Chaos/bifurcation control in physics.
- Experimental chaos and synchronization.
- Bridging the gap between ergodic and deterministic approaches.
- Providing a discussion forum for the physics, chaos and control system communities.



PAPER SUBMISSION

All papers must be submitted electronically as PDF files following the IFAC conference format through the conference submission website PaperPlaza. (<http://ifac.papercept.net/conferences/scripts/start.pl>)

Invited sessions

Invited session proposals should consist of a summary of the proposed session and a list of 4-6 papers with authors' name and e-mail address. It is the responsibility of the session organizer to ensure that the proposed authors also submit their full text draft papers by the submission deadline. All papers included in invited session proposals will also be subject to individual review.

SPONSORS

IFAC Technical Committee on Non-Linear Control Systems (TC 2.3)

Co-sponsoring IFAC Technical Committees:
TC 1.3 Discrete Event and Hybrid Systems
TC 1.5 Networked Systems
TC 2.1 Control Design
TC 2.8 Biological and Medical Systems

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