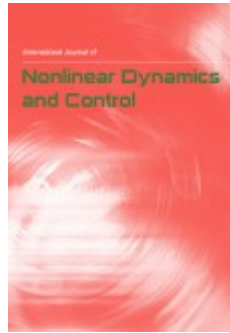


Call for Papers



International Journal of Nonlinear Dynamics and Control

CNCA 2019: Special Issue on: "Recent Trends in Control Systems: Advances in Theory"

Guest Editors:

Dr. Jesus Manuel Munoz-Pacheco, Dr. Jose Fermi Guerrero-Castellanos and Dr. Luz del Carmen Gómez-Pavón, Benemérita Universidad Autónoma de Puebla, Mexico

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Control systems are ubiquitous in several scientific areas ranging from living (biological, economic, social, etc.) to non-living (robotic, drone-based, chaotic, and so on) systems. As is well known, control theory asks how to influence the behaviour of a dynamical system with appropriately chosen inputs so that the system's output follows the desired trajectory or final state. In this regard, the automation of control systems, wherein a variable quantity is made to conform to a predetermined level, has been in use for several centuries; but, as with much technological development, the most rapid advances have taken place during recent years. Several control approaches such as open-loop control, feedback control, adaptive control, intelligent control, stochastic control and so forth have been used to control different linear and nonlinear dynamical systems. However, as the overall efficiency of machines or cutting-edge technologies increases, it demands even better control systems that operate within narrower error margins so that their efficiency is further increased.

This special issue is dedicated to the presentation and discussion of the latest innovations in automatic control and dynamics modelling. Contributions to the special issue should focus on the aspects of control theory and nonlinear dynamics.

The Guest Editors will be inviting substantially extended versions of selected papers presented at the [National Congress of Automatic Control \(CNCA 2019\)](#) for review and potential publication, but are also inviting other experts to submit articles for this call.

Subject Coverage

Suitable topics include, but are not limited, to the following:

- Control of cyber-physical systems
- Event-based control
- Control of power systems
- Robotics and mechatronics
- Fractional-order control
- Adaptive control
- Chaos control
- Fuzzy logic control
- Modern control
- Sliding mode control
- Nonlinear oscillator synchronisation
- Robust control and observer design
- Synchronisation of nonlinear systems with multi-stability
- Time varying and time delay systems control
- Control of UAVs
- Control of biological systems

Notes for Prospective Authors

Submitted papers should not have been previously published nor be currently under consideration for publication elsewhere. (N.B. Conference papers may only be submitted if the paper has been completely re-written and if appropriate written permissions have been obtained from any copyright holders of the original paper).

All papers are refereed through a peer review process.

All papers *must* be submitted online. To submit a paper, please read our [Submitting articles](#) page.

If you have any queries concerning this special issue, please email the Guest Editors:

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Important Dates

Manuscripts due by: *30 January, 2020*

Notification to authors: *30 March, 2020*

Final versions due by: *30 May, 2020*