

CALL FOR PAPERS - SPECIAL SESSION

“Learning methods in modeling and control of robotic systems”

for **CoDiT 2023**

July 03-06, 2023 ▪ **Rome, Italy**

Session Co-Chairs:

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Session description:

Identifying and controlling complex systems is a fundamental problem in a variety of application contexts, such as industrial, assistive or agri-food domains. As artificial Intelligence (AI) spreads into the fields of robotics and control, new possibilities open up to model and control complex systems. However, although AI-based technologies have the potential to transform these fields, many challenges and difficulties must be addressed, from dealing with data quality to achieving reliable and interpretable solutions. The connection between control and system identification theory and learning methodologies is crucial to bringing the best out of each discipline. The goal of the special session is to take a step towards such a connection by gathering recent advancements of learning-based control and model identification techniques, including model-free and data-driven approaches.

The topics of interest include, but are not limited to:

- Reinforcement learning
- System identification
- Learning from demonstrations
- Learning-based control
- Learning for physical human-robot interaction
- Data-driven control and identification
- Evolutionary algorithms
- Statistical learning
- Physics-informed algorithms

SUBMISSION

Papers must be submitted electronically for peer review through PaperCept by **January 27, 2023**:

<http://controls.papercept.net/conferences/scripts/start.pl>. In PaperCept, click on the **CoDiT 2023 link** “Submit a Contribution to CoDiT 2023” and follow the steps.

IMPORTANT: All papers must be written in English and should describe original work. The length of the paper is limited to a maximum of 6 pages (in the standard IEEE conference double column format).

DEADLINES

January 27, 2023: deadline for paper submission

April 15, 2023: notification of acceptance/reject

May 20, 2023: deadline for final paper and registration