



CALL FOR PAPERS - SPECIAL SESSION
“Recent advances for multi-robot systems”
for **CODIT 2026**
July 13-16, 2026 ▪ Bari, Italy

Session Co-Chairs:

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Session description:

Multi robot systems are increasingly deployed in industrial and service environments, requiring reliable coordination, safety guarantees, and efficient task allocation and path planning in various collaboration contexts.

This special session focuses on recent advances in the modelling, analysis, and control of multirobot systems (MRS). Key challenges in MRS are Multi-Robot Task Allocation (MRTA) and path planning, which involves coordinating a team of mobile robots to perform a set of tasks while optimizing an objective function and avoiding collisions and other risks.

The session aims to bring together original contributions proposing new modelling and analysis methods, verification algorithms, and innovative control structures for MRS. Both, theoretical studies and practical applications are encouraged.

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

- Modelling aspect: MILP formulations, Petri nets, automata, dioids algebra
- Coordination and collaboration methods
- Timed and energy constrained MRS problems
- Uncertain and dynamic environments exploration
- Collision and obstacle avoidance
- Applications for manufacturing systems, transportation systems, and so on.
- Supervisory control, task planning, and DES-based control.
- Graph theory–based approaches to optimize decision structures, task planning, collaborative logistics, routing, etc.
- Artificial intelligence applied to collaborative robotics.
- ...

SUBMISSION

Papers must be submitted electronically for peer review through PaperCept by **February 07, 2026** <http://controls.paperccept.net/conferences/scripts/start.pl>. In PaperCept, click on the **CoDIT 2026 link** **“Submit a Contribution to CoDIT 2026” 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

February 07, 2026: deadline for paper submission

April 30, 2026 : notification of acceptance/reject

May 20, 2026: deadline for final paper and registration