



**CALL FOR PAPERS - SPECIAL SESSION**  
**“Recent Advances in Multi-robot Systems: Modelling,  
Optimization and Applications”**  
for CODIT 2025, July 15-18, 2025, Split, Croatia

**Session Co-Chairs:**

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**Session description:** This special session deals with the problem of Multi-Robot Systems (MRS). In the last years, MRS have experienced considerable recognition due to various real-world applications. In particular, Multi-Robot Task Allocation (MRTA) is among the most interesting MRS problems. This problem concerns the situation when a set of given tasks must be performed by a team of mobile robots that collaborate with the intention of optimizing an objective function.

The goal of this special session is to gather novel approaches devoted to MRS problems and applications. In particular, new contributions for the development of modelling and analysis methods, verification and optimization algorithms, collaborative and control structures are encouraged including theoretical and application papers

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

- Modelling aspects
- Optimization, decision and control
- Dynamic routing and scheduling
- Formal methods
- Coordination and collaboration methods
- Artificial intelligence approaches
- Timed and energy aspects
- Uncertain and dynamic environments exploration
- Collision and obstacle avoidance
- Applications for manufacturing systems, transportation systems, inspection, search and rescue, and so on.
- ...

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## SUBMISSION

Papers must be submitted electronically for peer review through PaperCept by **February 07, 2025**: <http://controls.paperccept.net/conferences/scripts/start.pl>. In PaperCept, click on the **CoDIT 2025 link** “Submit a Contribution to CoDIT 2025” 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, 2025: deadline for paper submission

April 27, 2025: notification of acceptance/reject

May 17, 2025: deadline for final paper and registration