



CALL FOR PAPERS - SPECIAL SESSION

“The Role of Control Systems in Assistive and Rehabilitation Robotics”

for CODiT 2026

July 13-16, 2026 ▪ Bari, Italy

Session Co-Chairs:

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Session description:

This special session focuses on control architectures and methods related to decision making in assistive robotics enabling rehabilitation and assistive robots to operate safely and effectively in close interaction with users (humans). This special session is targeting assistive robotic devices such as the systems e.g., collaborative and assistive robots, mobile manipulators, neuroprostheses and exoskeletons. The emphasis is on the integration of **control**, **estimation**, and **learning** under real-world scenarios. The contributions to the special session are expected to combine the methodological advances with experimentally validated results highlighting robustness, personalization, reliability and safety in physical human-robot interaction and human-centred autonomy.

The goal is to inspire cross-fertilization between robotics, control, artificial intelligence, and biomedical engineering communities to accelerate the translation of assistive robotic technologies from prototypes to commercial devices to be used in homes, hospitals, and community environments.

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

- Shared autonomy and assistive teleoperation.
- Physical human-robot interaction control.
- Safety-critical control for assistive robotics.
- Learning-based and adaptive control.
- Human intention/state estimation for assistance.
- Control for wearable assistance such as exoskeletons, prostheses, gait/upper-limb assistance, and sit-to-stand, etc.
- Evaluation and benchmarking such as metrics, protocols, user studies, clinical validation, and datasets.
- Integrated assistive robotic systems such as smart environments/IoT, ROS2 deployment, and digital twins.

SUBMISSION

Papers must be submitted electronically for peer review through PaperCept by **February 07, 2026**:

<http://controls.papercept.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