



CONTROLO'2022

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[HTTPS://CONTROLO2022.DEEC.FCT.UNL.PT/](https://controlo2022.deec.fct.unl.pt/)

Special Session on “Human-Machine Interaction and Industry 5.0”

Organized by

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Call for Papers

Brief description of the theme. Machines should adapt to humans, and not the other way around. Nowadays the design of human-oriented devices constitutes a research topic of high interest. Closed-loop control with error feedback strategies can be employed to reduce human effort while interacting with a machine. The next industrial revolution, called Industry 5.0, aims to bring the human touch back to manufacture, not only to enhance the productivity, but also to ease all human activities. Quantum computing is a technology to implement a robust framework for Industry 5.0, appropriate to deal with complex problems and cybersecurity. The Industry 5.0 paradigm aims on syncing humans with machines for a better performance in the new, resilient, human-centred, post-pandemic Society. Humans will also interact with the collective intelligence of autonomous systems in Industry 5.0. The main goal of this track is to have researchers from different disciplines discussing and presenting new contributions on this topic as well as to help them understanding the distinct perspectives.

Topics of interest include, but are not limited to: Human Behavior modeling, Human in the Control-Loop, Human-Computer Interfaces, Human Adaptive Mechatronics, Intelligent Assistance devices, Skill analysis, Assistive Technology, Cobots, Healthcare, Biomedical devices and applications, Quantum computing, Emergent Intelligence, Hardware/Software design for the Industry 5.0/ Society 5.0.