

# **HFR 2019**

12th International Workshop on Human-Friendly Robotics

October 24-25, 2019 Reggio Emilia, Italy



"Romolo Valli" Theatre, Reggio Emilia (from Wikimedia Commons)

#### **General Chairs:**

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#### **Important Dates:**

Submission of contributed papers: June 24, 2019

Notification of paper acceptance: August 25, 2019

Submission of final papers: September 15, 2019

HFR 2019 Workshop: October 24-25, 2019

#### **CALL FOR PAPERS**

The growing need to automate daily tasks, combined with new robot technologies, is driving the development of human-friendly robots, i.e., safe and dependable machines, operating in the close vicinity to humans or directly interacting with them in a wide range of domains. The technological shift from classical industrial robots, which are safely kept away from humans in cages, to robots that are used in close collaboration with humans, is facing major challenges that need to be overcome.

The objective of the workshop is to stimulate a focused single-track discussion and bring together researchers so to share knowledge on design, control, safety and ethical issues, concerning the introduction of robots into everyday life.

#### List of topics

The list of topics include, but is not limited to:

Fundaments of human-friendly robots

- mechatronic design
- control methods for safe and adaptive interaction
- interaction-based robot design
- telerobotic systems
- methods for physical and cognitive human-robot interaction
- multimodal human-robot communication
- human monitoring and intention recognition
- cognitive modeling
- adaptive interfaces
- cooperative task execution and sliding autonomy
- learning by demonstration
- human factors
- benchmarking and performance analysis
- social and ethical issues

#### Applications of human-friendly robots

- · medical and rehabilitation devices
- prostheses and orthoses
- robot assisted therapy
- personal and entertainment robots
- collaborative robots
- social robots
- telerobotics
- human-robot interaction in hazardous environments.

**Venue**: HFR 2019 will take place in the Assembly Hall of the Hotel Posta, which is located in the heart of the oldest quarter of Reggio Emilia, Italy, within the ancient Palace "Capitano del Popolo".

Updated information on submission, registration and accommodation: http://www.hfr2019.unimore.it