

**4th IFToMM Symposium on
Mechanism Design for Robotics (MEDER 2018)
11-13 September 2018
University of Udine, Udine, Italy**

“Mechanism Design for Robotics in Space Application”

In the past decades, robots and automated mechanisms in the industry have been evolving and becoming increasingly advanced. However, improved performances originating from advancements in artificial intelligence and in new innovative materials, allow robots to be implemented in sectors where they were not widely exploited in the past.

Public-private partnerships, and commercial international activities are presented the opportunity to start new missions on the surface of the Moon, leading to exploratory human missions to the surface of Mars by the early 2030s.

For these challenges it is necessary to increase the level of autonomy of support systems, in order to pave the way for human exploration. Robotics is therefore of primary importance. Rovers, from simple moving platforms with limited handling capabilities, are expected to become more flexible and integrated with other robotic systems.

Accordingly, this track aims at reporting on the latest research in the field by covering topics including, but not limited to:

- Rovers
- Service robots for space applications
- Robot-assisted docking
- Human-robot interaction in space applications
- Innovative robotics
- Mechanisms for satellites
- Space telemanipulation

The track is organized by:

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