



**POLITECNICO**  
MILANO 1863

**DIPARTIMENTO DI  
SCIENZE E TECNOLOGIE  
AEROSPAZIALI**

# Robotics and Space Engineering in Tohoku University

**Professor Kazuya Yoshida,**

*Full Professor in Department of Aerospace Engineering,  
Tohoku University, Japan. He also serves as Director of  
Center of Robotics for Extreme and Uncertain Environments  
in Tohoku University since 2011*

In this seminar talk, past and recent activities on robotics and space engineering in Tohoku University, Japan are introduced. In the department of Aerospace Engineering, Professor Kazuya Yoshida has been conducting a variety of research activities on the dynamics and control of space robotic systems ranging from orbital free-flying robots to planetary exploration rovers. The activities are extended to the development of university-based micro satellites and also the terrestrial applications of space technology, such as robotic remote exploration for search and rescue missions. His technical contributions are evidenced by many space flight and robotic missions, such as ETS-VII (orbital experiments of a free-flying space robot), HAYABUSA / HAYABUSA-2 (Japanese asteroid sample return probes), RISING / RISING-2 (50 kg microsatellites for science mission) and QUINCE (a mobile robot to aid in the Fukushima power plant incident). The talk will highlight the university-based microsatellite development with its on-going results, and the topics around lunar/planetary exploration rovers including the challenge to Google Lunar XPRIZE.

**Monday, March 7, 2016  
h. 15:30, Room L.1.2  
Building B12, Campus Bovisa**

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Via La Masa 34  
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