

# First workshop for young researchers on Human-friendly robotics Napoli, 24 October 2008

[www.prisma.unina.it/youngresearchers.html](http://www.prisma.unina.it/youngresearchers.html)



Venue:



Palazzo dell'Innovazione e della Conoscenza  
via Terracina 230, Napoli, I

**SPONSORED BY:** Istituto Italiano di Tecnologia-IIT, Genova  
PRISMA Lab/Dipartimento di Informatica e Sistemistica, Università degli Studi di Napoli Federico II  
EU FP6 PHRIENS research project

The workshop is focused on design, modelling and control issues for the introduction of robot manipulators in everyday environments, with emphasis on safety, dependability, and real-world applications of service robots. The event is aimed at promoting scientific exchange and fostering cooperation among young European researchers in advanced robotics.

## PROGRAM

### 8:20\_ SESSION 1: SAFE ROBOTICS CONCEPTS (AUDITORIUM)

8:20–8:30 welcome and introduction by the organizers

8:30–8:50 Agostino De Santis, Università degli Studi di Napoli Federico II, I, "Modelling and control for Human-robot interaction"

8:50–9:10 Irene Sardellitti, Istituto Italiano di Tecnologia, Genova, I, "Human-friendly robotics: state of the art and future challenges"

9:10–9:30 Gianluca Palli, Università degli Studi di Bologna, I, "Variable stiffness actuation: modeling and control"

9:30–9:50 Sebastian Wolf, Deutsches Zentrum für Luft- und Raumfahrt-DLR, Oberpfaffenhofen, D, "From actively compliant lightweight robots to intrinsically compliant systems"

9:50–10:10 Nikos Tsagarakis, Istituto Italiano di Tecnologia-IIT, Genova, I, "Incorporating compliance to the 'iCub' child humanoid robot"

10:10–10:30 Bram Vanderborght, Istituto Italiano di Tecnologia-IIT, Genova, I, "Safe control of a pneumatic muscle powered system"

### 10:30\_ BREAK

### 10:50\_ SESSION 2: HUMAN-CENTERED ROBOTICS APPLICATIONS (AUDITORIUM)

10:50–11:10 Vincent Padois, Université Pierre et Marie Curie, Paris, F, "Dealing with challenging robots, environments and missions: operational space control in the context of motor learning"

11:10–11:30 Giovanni Stellin, SSSUP S. Anna, Pisa, I, "Towards real-world applications of humanoid robotics: the Robot-An Lab case"

11:30–11:50 Emanuele Cattin, SSSUP S. Anna, Pisa, I, "A case-study of the neuro-robotics paradigm: NEURARM and NEUROExos"

11:50–12:10 Carlos Pérez Martínez, Universidad Carlos III de Madrid, E, "Assistive robots dependability in domestic environment: the ASIBOT kitchen test bed"

12:10–12:30 Paolo Pierro, Universidad Carlos III de Madrid, E, "Robots in future collaborative working environments"

12:30–12:50 Paolo Robuffo Giordano, Max Planck Institute for Biological Cybernetics, Tübingen, D, "The Cyberwalk platform: Human-machine interaction enabling unconstrained walking through Virtual Reality "

### 15:00\_ PANEL DISCUSSION (AULA SEMINARI)

15:00-17:00 Robots in everyday environments: suggestions and possible cooperation in the robotics research community

## ORGANIZERS

Agostino De Santis, Università degli Studi di Napoli Federico II

Irene Sardellitti, Istituto Italiano di Tecnologia, Genova

## CONTACT

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