



ICRA 2012
St. Paul – Minnesota – USA May 14-18, 2012
2012 IEEE International Conference on Robotics and Automation



IEEE Theme: Robots and Automation: Innovation for Tomorrow's Needs

Workshop: Modular Surgical Robotics: how can we make it possible?

18th May 2012, St. Paul - Minnesota, USA



<http://www.icra2012.org/>

Chairs:

Paolo Fiorini, University of Verona, Italy
Giancarlo Ferrigno, Politecnico di Milano, Italy
Elena De Momi, Politecnico di Milano, Italy

IMPORTANT DATES

Deadline for submission of contributions: **April 15th, 2012**

Notification of Acceptance: **May 1st, 2012**

CALL FOR CONTRIBUTIONS

We invite scientists and companies active in the field of **robotic surgery** to submit contributions to the Workshop on Modular Surgical Robotics that will be held at ICRA2012. Contributions are expected to discuss how surgical robotics can be made modular by means of appropriate methods, e.g. standards, new interfaces, software and hardware architectures, validation, and benchmarking. The workshop topics are in the focus of the new

European project Eurosurge

(
<http://www.eurosurge.eu/>
) , which is aimed at structuring
a

network of laboratories

in robotic surgery and at

promoting modularity

in

the cooperative (open hardware) development of robots.

The workshop will be divided into three sessions:

the first summarizing the current status of Eurosurge; the second with presentations from experts outside the project; and the third with a discussion expected to provide suggestions and opinions about introducing modularity into robotic surgery.

Program:

8:30

Welcome

8:35 P. Fiorini

Robotic surgery, the need for synergies and standardization

9:05 G. S. Virk

International robot safety standardization

9:35 T. Haidegger

Standardization efforts in medical robotics

10:05

Coffee break

10:30 G. A. Cole

Closed-loop actuated modular surgical system utilizing real-time in-situ MRI

11:00 G. Ferrigno

Modular control strategies in neurosurgical robots

11:30 F. Vicentini

Distributed real-time robot control: the ACTIVE project experience

12:00

Lunch

13:30 J. Hergenhan

An electrotactile display with spiked electrodes for robot-assisted minimally

14:00 P. Fiorini

Patient safety and automation in robotic surgery: the Safros and Isur EU pro

14:30 K. Althoefer

Variable stiffness controllable and learnable manipulator for MIS

15:00 K. Cleary
15:30

A modular system architecture for robotic natural orifice transluminal endoscopy
M. Niccolini Development of robotic platforms for single port and

16:00

Coffee break

16:30
17:00 P. Fiorini

G. Salvietti
Discussion

A task priority approach for modular robots in minimally

17:30

Closing

Please send inquiries and contributions to:

Mrs. Carla Benoldi: carla.benoldi@gmail.com