National and International Research and Development Programs and Projects

Chair: Georges Giralt, LAAS-CNRS, France

Speakers:

R. Bajcsy, NSF
G. Bekey, University of Southern California
S. Bensasson, Future Emerging Technologies Unit, IST, European Union
H. Inoue, University of Tokyo
D.E. Okhotsimsky, V. Gradetsky, Russian Academy of Sciences
S. Sastry, M. Swinson, DARPA/ITO
M. Uhran, S. Lide, NASA

The support of key enabling technologies such as IT, micro and emergent nano technologies fosters the shift of robotics and advanced automation out of the shopfloor and the well engineered environments towards a host of novel applications ranging from field robotics to everyday's life human-centered robotics. The shift in paradigm, which strongly emphasizes human machine interaction, calls more than ever for cooperative programs and projects both at the national and international level.

This symposium attempts to discuss this shift, starting with introductory outline on the efforts being carried within the International Advanced Robotics Program (IARP), and continuing with two series of in-depth presentations.

Five large scale programs:

- *Challenges and Opportunities for Robotics Research in the Information Technology Research Initiative*
  R. Bajcsy, NSF
- *Basic and Applied Research in IT - Bridging the gap in the programs of the European Union*
  S. Bensasson, IST, EU
- *HRP: Humanoid Robotics Project*
  H. Inoue, Tokyo University
- *Robotics at ITO, DARPA*
  S. Sastry, M. Swinson, ITO, DARPA
- *Robotics and the Commercial Development of Space at NASA*
  M. Uhran, S. Lide, NASA

And two special presentations :

- *Current Robotics Activities in Russia, Pursuing the Tradition of Pioneering Past Achievements*
  D.E. Okotsimsky and V. Gradetsky, Russian Academy of Sciences
- *Robotic Assembly of Satellite Power Systems*
  G. Bekey, University of Southern California