IEEE/RSJ International Conference on Intelligent Robots and Systems





# Workshop

## **Robot Competitions: What Did We Learn?**

Organisers: Jorge Dias, Kaspar Althoefer, Pedro Lima

http://ap.isr.uc.pt/events/WSCompetitions\_iros2015/











## **Objectives**

This workshop aims to review past robot competitions and to find out what can be learnt from such competitions and to what extent these competitions underpin and further robot research.





#### **Outcomes**

- 1. The workshop will attempt to create guidelines for future robot competitions and how those can be improved so that tangible results useful for future research and technological development.
- 2. Synergies that will arise from robotic competitions for education, for the advance of modern robots and robotic technologies and/or to promote practical applications, such as rehabilitation, medical robotics, care of the elderly, search and rescue, factories of the future, etc.





## **PROGRAM**

08:30 - 08:40: Participants reception and Welcome Session

08:40 – 10:30: Organizing a Competition — Benefits, Lessons and Errors

- 08:40 "RoboCup: Insights on Its Success and Challenges", Manuela Veloso, CMU, USA
- 09:00 "RoCKIn: the Journey So Far and the Upcoming Final Competition", Pedro U. Lima, Instituto Superior Técnico, U. Lisboa, Portugal
- 09:20 "EuRoC: European Robotics Challenges", Rainer Bischoff, KUKA Roboter, Germany
- 09:40 Alan Winfield, UWE Bristol, UK "euRathlon: An Outdoor Robotics Challenge for Land, Sea and Air"

10:00 - 10:30: Coffee Break

10:30 - 12:00 : New Initiatives on International Robotic Challenges

- 10:30 "CYBATHLON: Championship for Athletes with Disabilities", R. Riener, ETHZ, Switzerland
- 11:00 "MBZIRC: The Mohamed Bin Zayed International Robotics Challenge", Lakmal Seneviratne, Khalifa University, UAE – "
- 11:30 "Future Challenges: Designing ICT Prizes for Europe", Emanuele Ruffaldi, Scuola Superiore Sant'Anna, Italy

12:00 - 12:45 : Panel Discussion (debate on Impact (cost/benefit) of Robot

Competition and Challenge Initiatives) – with all speakers

12:45 : Workshop Closure





### INTEND TO ADDRESS THE FOLLOWING QUESTIONS:

- 1. What is the impact of robot competitions on Robotics research?
- 2. Is there evidence that robot competitions accelerate robot technology an innovation?
- 3. Are robot competitions useful tools to train early-career roboticists?
- 4. Are robot competitions successful in bringing younger people to the field of Engineering and Robotics?
- 5. Are robot competitions a good tool in promoting robotics to lay people / the public? Can more be done to improve on the current state?





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## To Continue ...









