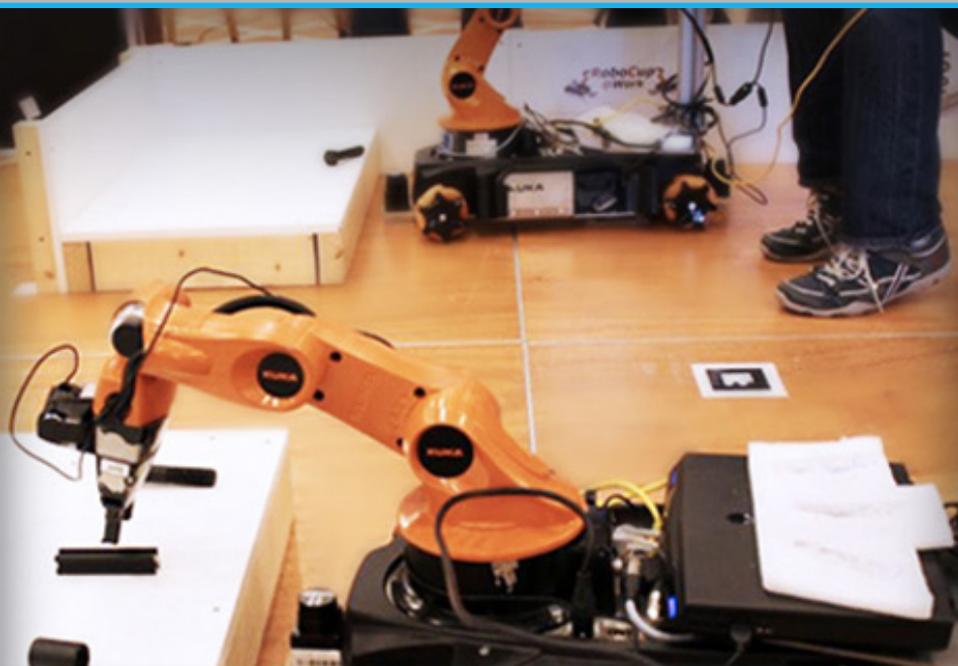


Robot Competitions Kick Innovation in Cognitive Systems and Robotics

ROCKIN

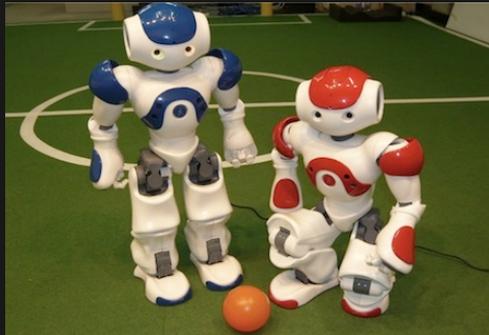


Pedro U. Lima
IST – TU Lisbon
Coordinator



Vision

Robot competitions as a powerful mean to foster progress in Robotics R&D





RoCKIn's competition led innovation

- A catalyst for smarter, more dependable robots
- Focus on cognitive skills and networked robots
- Will develop standardised testbeds and benchmarks that will streamline R&D for the future



The consortium



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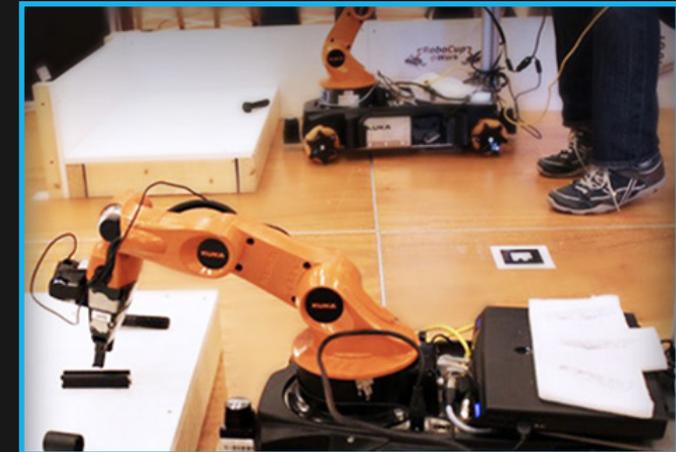
Herman Bruyninckx, University of Leuven, Belgium

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RoCKIn@Work

- **Innovative robot applications in industry that:**
 - Work interactively with humans
 - Have reduced initial programming requirements
 - Have enhanced physics simulation capabilities
- **Contribute to the continued commercial competitiveness of European industry**



RoCKIn@Home

- **Socially beneficial domestic service robots that**
 - Have enhanced networking and cognitive abilities
 - Support the impaired and the elderly
- **Contribute to an improved quality of life for the population of Europe**



RoCKIn



RoCKIn@Work

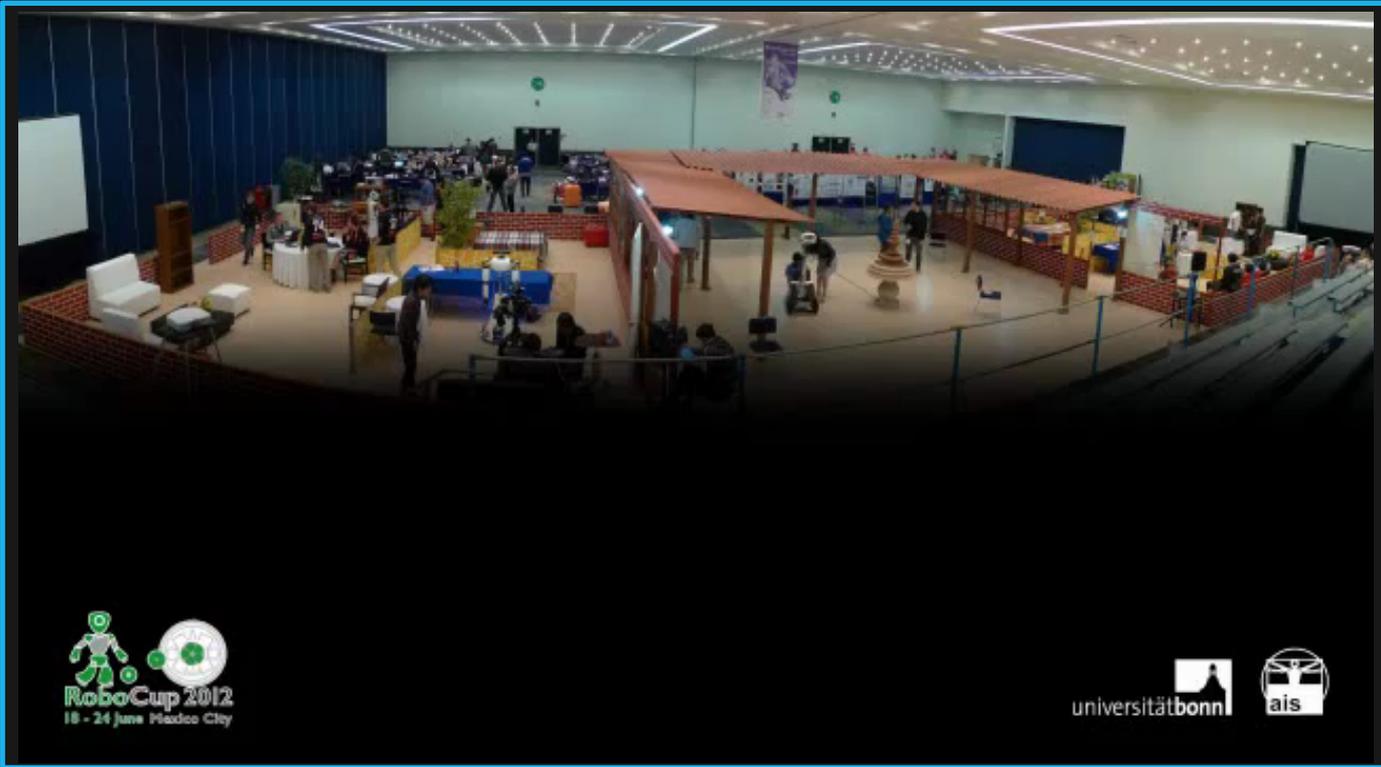
IROS 2012 Robot Competition





RoCKIn@Home

RoboCup@Home 2012 Winner Team





Competition Events

Camps and
Community Building

Test Beds

RoCKIn@Work
RoCKIn@Home

Dissemination

Benchmarking





Camps and related events

- **RoCKIn Kickoff Camp (2013)**
 - will introduce potential participants to the RoCKIn project with the ultimate aim of facilitating the entry of new teams into RoCKIn@Home and RoCKIn@Work.
 - It will involve lectures, attending and evaluating parts of RoboCup@Home and RoboCup@Work, and participation in the RoboCup symposium.
- **June 28th to July 1st during RoboCup2013, Eindhoven**
- **RoCKIn will provide travel, accommodation, and access to the RoboCup venue, symposium and an exclusive social event for the 16 selected candidates.**



The background of the slide features a technical drawing or schematic diagram. It includes various components and labels such as 'QF7', 'TV1', 'SF1', 'ZA', 'A12', '30', '31', 'K16', '100', 'K17', '101', 'K12', '102', 'SB1', '40', '14', '54', '55', 'SB14', 'K11', 'K12', 'K13', 'SB15', '60', 'K11', 'K12', 'K13', 'K17', 'K12', 'K13'. The drawing is rendered in white lines on a dark blue background.

Camps and related events

- **RoCKIn Camp**
 - Planned for 2014
 - Small groups working together to build upon 2013 introductory event
 - Aim is to educate, advance current tech and develop robots appropriate for RoCKIn competitive events
- **RoCKIn Field Exercise**
 - Planned for 2015
 - Supports the final stage of team development
 - Opportunity to test creations in a real world situation
- **Forums and workshops**



Competition events

- **2014:**
 - Planned for AUTOMATICA 2014, Munich (TBD), in May



- **2015:**
 - Planned for European Robotics Week, Lisbon, end of November



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