

Thursday May 3 2012

8:00-9:00 Registration

9:00-9:10 Welcome Note

Invited Talk

9:10-10:00 Prof. Michael Beetz, Cognition-Enabled Control for the Realization of Home Chore Task Intelligence

10:00-10:30 Coffee Break

Technical Session I - Mechanisms and Control

- Johannes Mayr, Bernhard Oberhuber, Hubert Gatttringer and Hartmut Bremer. *Development and Control of a Modular Biped Walking Machine*
- Johannes Karl Eberharter, Thomas Pfister, Markus Öttl and Robert Amann. *Trajectory Control for 3RPR Manipulators*
- Igor Kovač and Marko Gračner. *An Intelligent Multipurpose End-Effector System for a Hydraulic Telescopic Handler*
- Riko Safaric, Gregor Skorc, Jure Cas and David Lukman. *From micro precision robots to nano precision robots*
- Heiko Hamann, Jürgen Stradner and Thomas Schmickl. *Towards Morphological Flexibility: Modular Robotics and Bio-inspired Control*

12:30-13:30 Lunch Break

Technical Session II - Search and Rescue

- Andreas Huber, Markus Vincze, Wolfgang Netzer, Angel Rodriguez and Lukas Silberbauer. *TAUROB tracker: A Remotely Operated Robot with a Biological Inspired Steering Assistance System*
- Zdenko Kovacic, Marko Cukon, Kristijan Brkic, Goran Vasiljevic, Alan Mutka and Damjan Miklic. *A Four-flipper Tracked Robot for Exploration & Inspection in Life-threatening Environments*
- Vera Mersheeva and Gerhard Friedrich. *Routing of Multiple Micro UAVs for Rescue Missions*
- Daniel Wischounig-Strucl and Bernhard Rinner. *Incrementally Generated Wide Area Mosaics for Rescue Scenarios by Networked UAVs*

15:30-16:00 Coffee Break

Public Event

- Exhibition Tour
- Poster Session
- First Responder Demo

19:00 **Workshop Banquet**

presented and hosted by Knapp AG

shuttle bus service to Knapp AG will be organized

Friday May 4 2012

8:00-9:00

Registration

Student and Short Paper Session

9:00-10:00

- Luis Mateos and Markus Vincze. *DeWaLoP In-pipe Redevelopment System Design*
- Florian Ehrentraut, Christian Landschützer, Dominik Lechner, Christian Matt, Wolfgang Pichler, Bernhard Puchinger, Gerald Steinbauer and Daniel Wimmer. *Kombot - An Autonomous Mobile Order Picking Robot*
- Walter Wohlking, Andreas Baldinger and Markus Vincze. *Eva: A Low-Cost Robotic Head for Interactive Learning of Categories from the Web*
- Ekaterina Potapova, Michael Zillich and Markus Vincze. *3D Information as a Way to Improve the Quality of Attention Points*
- Matevž Bošnjak and Sašo Blažič. *Graphical glyph-based sparse VSLAM*
- Marco Bonini, Kristina Tishchenko, Alice Kirchheim and Wolfgang Echelmeyer. *Application of Cognitive Robotics within Logistics*

10:00-10:30

Invited Talk

Prof. Jadran Lenarčič, From industrial to human robots and back

10:30-10:45

Coffee Break

Technical Session III - Intelligent Systems and Solutions

10:45-12:45

- Robert Kuschig, Evsen Yanmaz, Ingo Kofler, Bernhard Rinner and Hermann Hellwagner. *Profiling IEEE 802.11 Performance on Linux-based Networked Aerial Robots*
- Andreas Wendel, Michael Maurer, Mario Katusic and Horst Bischof. *Fuzzy Visual Servoing for Micro Aerial Vehicles*
- Dietmar Schreiner. *Optimizing Compilers for Safety-Critical Robotic Systems*
- Matthias Plasch, Andreas Pichler and Martijn Rooker. *Simplified Programming of Modular Robotic Systems based on Workflow Modeling*
- Markus Bader, Helmut Brunner, Thomas Hamböck, Markus Vincze and Alexander Hofmann. *Stable Distributed Background: Approaches to solve the Uniform-Goal-Problem within the SPL League for the RoboCup WC 2012*

12:45-13:30

Lunch Break

13:30-14:30

Panel Discussion

“Robotics Research – What does Industry expect and what Academia think is needed.”

Panelists (confirmed)

- Manfred Kainz, TCM International, Austria
- Jadran Lenarčič, Jožef Štefan Institute, Slovenia
- Heinz Kammerlander, Knapp Systemintegration GmbH, Austria
- Alessandro Farinelli, University Verona, Italy
- Franz Wotawa, Graz University of Technology, Austria

Moderation: Katrin Reisinger, Hans-Joachim Schlobach, RS Verlag, Austria

**Tutorial on Multi Robot
Coordination**

14:30-16:30

Dr. Alessandro Farinelli