

Workshop Program 2011

The program will include one invited talk, oral presentations of referred contributions, a student-paper/poster presentation as well as robot presentations and a tutorial session. The basic structure of the workshop will be organized as follows:

All sessions will be held at **HS001, UMIT, ground floor.**

Day1: mobile robots & robot demonstrations (RoboCup, Rescue Robots, Service Robots)

Registration:

07.45 – 08.45 Workshop Registration

Opening Speech:

08.45 – 09.00 Michael Hofbaur and Manfred Husty

Invited Talk:

09.00 – 10.00 Vijay Kumar, *Autonomous Flight Cooperative Control of Multiple Micro Aerial Vehicles*

10.00 – 10.30 Coffee break

Session M1:

10.30 – 10.55 Dietmar Schreiner, *iRIS - Towards a Robotic Immune System*

10.55 – 11.20 Gerald Steinbauer, *Robust Robotics Using History-Based-Diagnosis in IndiGolog*

11.20 – 11.45 Franz Wotawa, *(Still) open research questions to be solved in the context of smart autonomous systems*

11.45 – 12.10 Justus Piater, *Grasp Generalization Via Predictive Parts*

12.10 – 12.35 Joachim von Zitzewitz, *A user-cooperative, reconfigurable tendon-based robot: design, synthesis, and applications*

12.35 – 13.00 Markus Quaritsch, *FAMUOS: A Multi-UAV System for Aerial Reconnaissance in Rescue Scenarios*

13.00 – 14.00 Lunch

Session M2:

14.00 – 14.20 Norbert Rath, *Being specialized, a role based approach for a new robot platform*

14.20 – 14.40 Michael Kollar, *The application of pneumatic actuators in RoboCup's Middle Size League*

14.40 – 15.00 Markus Eger, *Kick it like Beckham - Learning kicker parameters using reward-*

weighted regression

15.00 – 15.20 Christof Hoppe, *Keyframe-Based Visual SLAM in Large-Scale Environments*

15.20 – 15.40 Wolfgang Pointner, *Formal Methods-based System Development for General Aviation and Autonomous Aircraft*

15.40 – 16.00 Coffee break

Afternoon of Robotics:

16.00 – 18.00 Demonstrations (public event)

Social Event:

19.00 (approx.) social event, historic center of Hall

Day 2: serial / industrial robots & tutorial

Session T1:

09.00 – 09.25 Johannes Karl Eberharder, *Multi-Body Dynamics for Large-Scale Manipulators with distinct Topologies utilizing Kinematical Transformers*

09.25 – 09.50 Markus Bader, *A Visual Servo Control Overhead Crane*

09.50 – 10.15 Brian Moore, *Robotic grasping through human visuomotor learning*

10.15 – 10.30 Coffee break

Session T2:

10.30 – 10.55 Andreas Pichler, *LOCOBOT: Toolkit for building low cost robot co-workers in assembly lines*

10.55 – 11.20 Sebastian Klug, *Performance of a Service Robot as Surgical Assistant*

11.20 – 11.45 Georg Nawratil, *Self-motions of parallel manipulators associated with flexible octahedra*

Session P (Poster):

11.45 – 11.50 Thomas Höll, *Vision-based grasping of objects from a table using the humanoid robot Nao*

11.50 – 11.55 Mathias Hubrich, *ForBot - Scalable Research Robotics System*

11.55 – 12.00 Daniel Lehrner, *Consensus and time synchronization between mobile robots*

12.00 – 12.05 Stefan Enderle, *First Investigations of a novel ARM Board for LabVIEW-driven Mobile Robots*

12.05 – 12.10 Georg Rauter, *Robot-assisted human motor learning in sports*

12.10 – 13.00 *Discussion*

13.00 – 14.00 Lunch

Tutorial:

14.00 – 17.00 Andrew Coles, *Temporal and Continuous Planning*

Invited Talk: Prof. Vijay Kumar, *Autonomous Flight and Cooperative Control of Multiple Micro Aerial Vehicles*. University of Pennsylvania - Philadelphia, USA. ([Homepage](#))

PhD-Student Tutorial: Andrew Coles, *Temporal and Continuous Planning*. University of Strathclyde - Glasgow, Scotland. ([Homepage](#))