

Symposium on Assistive and Wearable Robotics (AsWeR 2019)

16 - 17 May, 2019, Karlsruhe

Venue

Messe Karlsruhe

Messeallee 1

D-76287 Rheinstetten

<https://www.rehab-karlsruhe.com/en/register-plan/for-visitors/getting-there/>

Registration

Registration opens 16 May, 10:00 am

Duration of the presentations

Keynotes	30 minutes (25 minutes talk + 5 minutes Q&A)
Oral presentations	10 minutes (8 minutes talk + 2 minutes Q&A)
Interactive presentations	30 minutes poster session

Programme

Thursday, May 16

Time	Session
12:45	Lunch
13:45	Opening Tamim Asfour, KIT, Germany
14:00	Cyathlon: Moving People and Technology <i>Robert Riener, ETH Zürich, Switzerland</i>
14:30	Human Balance Control: From Experiments to Predictive Models to Applications in Wearable Robots <i>Herman van der Kooij, University of Twente, Netherlands</i>
15:00	Machine learning in BCI: getting as smart as the brain <i>Patrick van der Smagt, Volkswagen Group Machine Learning Research Lab, Germany</i>
15:30	Coffee Break
16:00	Processes in Restoring Sense of Touch to Spinal Cord Injured Patients <i>Gordon Cheng, Technical University of Munich, Germany</i>
16:30	Human-centred robotic systems: From intelligent mobility assistant robots to robot avatars (cancelled) <i>Angelika Peer, Free University of Bozen-Bolzano, Italy</i>
16:30	Biologically-inspired modeling of complex human body movements and applications in robotics <i>Martin Giese, University of Tübingen, Germany</i>
17:00	CYBATHLON Interactive Session
17:30	SoftHand Pro: a Robust and Adaptive Bionic Hand to Enable Physical Interaction <i>Cristina Piazza, Giorgio Grioli, Antonio Bicchi and Manuel Giuseppe Catalano</i>
17:40	Simultaneous and Proportional Myoelectric Control of Hand Prostheses - Evaluation in Daily Life <i>Janne Hahne, Meike Schweisfurth, Mario Koppe, Dario Farina and Arndt Schilling</i>

17:50	The KIT Prosthetic Hand <i>Pascal Weiner, Julia Starke, Samuel Rader, Felix Hundhausen and Tamim Asfour</i>
18:00	Task decomposition as a new approach for assessing the prosthesis performance in standardized tests <i>Jeremy Mouchoux, Arndt Schilling and Marko Markovic</i>
18:10	Textile-Based Soft Wearable Actuators <i>John Nassour and Fred Hamker</i>
18:20	Human Factors as Guiding Principles for Wearable Robot Design <i>Philipp Beckerle</i>
18:30	Transfer to restaurant
19:00	Symposium Dinner at Kesselhaus Färberei Griesbachstraße 10 c 76185 Karlsruhe

Friday, May 17

Time	Session
9:00	Robotic Technology in Everyday Use Assistive Devices: A Reality Check <i>Roland Auberger, OttoBock Healthcare, Austria</i>
9:30	Bionic Protheses for Trauma Surgery Patients <i>Arndt Schilling, University Medical Center Göttingen, Germany</i>
10:00	Magnetometer-free Inertial Motion Capture System with Visual Odometry <i>Atabak Nezhadfar, Bertram Taetz, Patrick Vonwirth, Karsten Berns and Gabriele Bleser</i>
10:10	Online planning and control of ball throwing by the humanoid robot COMAN and validation exploiting VR in rehabilitation scenarios with ataxia patients <i>Jindrich Kodl, Albert Mukovskiy, Pouya Mohammadi, Milad Malekzadeh, Nick Taubert, Doris Broetz, Tjeerd M.H. Dijkstra, Jochen J. Steil and Martin A. Giese</i>
10:20	Coffee Break
10:50	Augmenting Humans with Supernumerary Robotic Fingers <i>Domenico Prattichizzo, University of Siena, Italy</i>
11:20	Intuitive Grasping, Perspectives on Prosthetic Development <i>Gerwin Smit, TU Delft, Netherlands</i>
11:50	Biomechanical gait models and concepts - how can they help to analyze and synthesize motions? <i>André Seyfarth, Technische Universität Darmstadt</i>
12:20	A lower limb segment based control concept for exoskeletons with anti-gravity support <i>Martin Grimmer, Kai Schmidt, Jaime Duarte, Lukas Neuner, Gleb Koginov and Robert Riener</i>
12:30	A Lower Limb Exoskeleton with Kinematically Compatible Joint Mechanisms <i>Jonas Beil, Charlotte Marquardt and Tamim Asfour</i>
12:40	Template-based control of prosthetic feet <i>Amirreza Naseri, Martin Grimmer, André Seyfarth and Maziar Ahmad Sharbafi</i>
12:50	Closing
13:00	Lunch (Vouchers)

13:00	CYBATHLON Qualification Races
14:00	Transfer to the lab tour via tram (for those interested) Institute of Anthropomatics and Robotics, High Performance Humanoid Technologies (H2T)

CYBATHLON Powered ARM and LEG Prosthesis Series

The CYBATHLON Prosthesis Series in Karlsruhe is a combined Series which includes two disciplines (arm and leg prosthesis). It will take place on May 17-18, 2019.

Further Information

Webpage CYBATHLON Prosthesis Series and Symposium:

<http://www.cyathlon-symposium-karlsruhe-2019.org/>

H2T Lab: <http://www.humanoids.kit.edu>

Contact

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