

Session 6: Humanoid and Wearable Systems

(continued)

11:30 - 12:00

Assistive Robotics Research in Korea

Bum-Jae You, *Korea Institute of Science and Technology (KIST)*

12:00 - 12:30

Design and Control of Assistive Systems Integrated with Wearable Robots

Doyoung Jeon, *Sogang University*

12:30 - 13:00 | Concluding Remarks

Experiences and Perspectives in the Field of Human-Centered and “Soft” Robotics

Alin Albu-Schäffer, *German Aerospace Center (DLR)*
Z. Zenn Bien, *KAIST*
Gerd Hirzinger, *German Aerospace Center (DLR)*

13:00 | Lunch Break

Labtours (invitees only)

14:00 - 15:45 | Technische Universität München (TUM)

Lehrstuhl für Steuerungs- und Regelungstechnik (LSR)
(Institute of Automatic Control Engineering)
Theresienstraße 90, 80333 München

Institute for Cognitive Systems (ICS) &
Human Robot Interaction for Automation Systems (HRI)
Karlstraße 45, 80333 München

15:45 - 16:45 | Bus Transfer

16:45 - 18:00 | German Aerospace Center (DLR)

Robotics and Mechatronics Center (RMC)
Münchner Straße 20, 82234 Wessling

18:30 | Dinner

Gasthaus Ruf
Marienplatz 2a, 82229 Seefeld

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Contact

Ruth Narmann
German National Academy of Sciences Leopoldina
Phone: +49 (0)345 472 39 - 835
E-mail: ruth.narmann@leopoldina.org
www.leopoldina.org

Venue

Technische Universität München (TUM)
Vorhoelzer Forum
Arcisstraße 21, 80333 München, Germany

Human-Centered Assistive Robotics

Joint Academies' Symposium of the
German National Academy of Sciences Leopoldina and
the Korean Academy of Science and Technology (KAST)

27 - 28 October 2014

Technische Universität München (TUM) · Vorhoelzer Forum

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Programme

Monday, 27 October 2014

8:45 - 9:00 | Registration

9:00 - 9:30 | Welcome Addresses and Introductions

Welcome Addresses

Wolfgang A. Herrmann, *President of Technische Universität München (TUM)*

Sung Hyun Park, *President of the Korean Academy of Science and Technology (KAST)*

Jörg Hacker, *President of the German National Academy of Sciences Leopoldina*

Introductions

Z. Zenn Bien, *Korean Advanced Institute of Science and Technology (KAIST)*

Gerd Hirzinger, *German Aerospace Center (DLR)*

Session 1: Safe Human Robot Interaction

9:30 - 10:00

Next Generation Robot Arms for Human-Robot Collaboration

Jae-Bok Song, *Korea University*

10:00 - 10:30

Robots for Humans: A Perspective from Safe and Intuitively Programmable Assistance Robots

Sami Haddadin, *Leibniz Universität Hannover*

10:30 - 11:00

Realizing Close Contact Interactions in Human-Centered Assistive Robotics

Gordon Cheng, *Technische Universität München (TUM)*

11:00 | Group Photo

11:10 | Coffee Break

Session 2: Learning Systems

11:30 - 12:00

Autonomous Learning Assistive Robots through Interaction

Dongheui Lee, *Technische Universität München (TUM)*

12:00 - 12:30

Teaching and Learning in Human-Centered Robotics

Stefan Schaal, *Max Planck Institute for Intelligent Systems, Tübingen*

12:30 - 13:00

Machine Learning in Assistive Robotics

Patrick van der Smagt, *Technische Universität München (TUM)*

13:00 | Lunch Break

Session 3: Home-mates and Elderly Care Robots

14:00 - 14:30

Service Robots to Support Care Personnel and People in Need of Care

Birgit Graf, *Fraunhofer Institute for Manufacturing Engineering and Automation (IPA), Stuttgart*

14:30 - 15:00

Realization of Human-friendly Assistive Robotic Systems for Smart Home Environment

Z. Zenn Bien, *KAIST*

15:00 - 15:30

Robotic Agents Performing Human-Scale Everyday Manipulation Tasks - In the Knowledge Lies the Power

Michael Beetz, *University of Bremen*

15:30 - 16:00

HomeMate: an Elderly-Care Robot with Visually Guided Errand and Interaction Services

Sukhan Lee, *Sung Kyun Kwan University (SKKU)*

16:00 | Coffee Break

Session 4: Perception and Planning Aspects

16:30 - 17:00

Perception and Planning for Cognitive Service Robots

Sven Behnke, *University of Bonn*

17:00 - 17:30

Beyond Classical Planning

Bernhard Nebel, *University of Freiburg*

17:30 - 18:00

Towards Interactive Robots in Urban Environments

Dirk Wollherr, *Technische Universität München (TUM)*

18:00 - 18:30 | Impressions Day One

19:00 | Conference Dinner (invitees only)

Zum Augustiner

Neuhauserstraße 27, 80331 München

Tuesday, 28 October 2014

Session 5: Medical Systems

9:00 - 9:30

Medical Robots Towards Noninvasive Surgery

Dong Soo Kwon, *Korean Advanced Institute of Science and Technology (KAIST)*

9:30 - 10:00

Biomedical Micro/Nano Robotics in Different Approaches

Jong-oh Park, *Chonnam National University*

Session 6: Humanoid and Wearable Systems

10:00 - 10:30

Humanoid Robotics: From Household Assistants to Personalized Robot Suits

Tamim Asfour, *Karlsruhe Institute of Technology (KIT)*

10:30 - 11:00

Development and Control of Compliant Humanoid Robots at DLR

Christian Ott, *German Aerospace Center (DLR)*

11:00 | Coffee Break
