

WORKSHOP

Mechatronics, Control, and Cyber-Physical Systems in the 21st Century: From Autonomous Driving, Medical Engineering, Communication, and Artificial Intelligence

Friday, 01 December 2023, 13:00 – 18:00
Hexagon, S3|11, Lecture Hall 0012
Landgraf-Georg-Straße 2, Darmstadt

PROGRAM

- 13:00-13:20 **Welcome**
- 13:20-14:00 **Motion Analysis and Motion Assist - Body Sensor Networks and Exoskeletons**
Steffen Leonhardt, RWTH Aachen
- 14:00-14:40 **Adaptive Structures and Facades in Civil Engineering –
a New Field for Intelligent Mechatronics**
Oliver Sawodny, Universität Stuttgart
- 14:40-15:30 **Coffee Break**
- 15:30-16:10 **Why Mercedes-Benz Chose to Build Their Own Operating System MB.OS**
Michael Hafner, Mercedes-Benz AG, Stuttgart
- 16:10-16:50 **Energy Efficiency and Cybernetics? – Data-driven,
Stochastic and Distributed Control Challenges of Multi-Energy Systems**
Timm Faulwasser, TU Dortmund
- 16:50-17:30 **Machine Learning-based Lifetime Prediction and Charging Optimization
of Lithium-ion Batteries**
Richard D. Braatz, MIT, Cambridge, USA
- 17:30-17:50 **A Brief View Back**
Rolf Isermann, TU Darmstadt
- 17:50-18:00 **Closing**
Rolf Findeisen, TU Darmstadt