

**Wednesday, May 7**

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| 08:30         | Registration  |
| 09:00         | Opening   |
| 09:15         | <b>Arndt Lüder (Otto von Guericke University Magdeburg)</b><br>Mechatrical engineering of production systems and its new challenges (also) for mathematical research                        |
| 10:00         | <b>Daniel Wolff (inpro, Berlin)</b><br>Digital factory goes blue – energy and resource efficiency aspects   |
| 10:30 – 11:00 | – Coffee Break –  |
| 11:00         | <b>Luca Ghezzi, Aldo Sciacca (ABB Italy S.p.A., Vittuone)</b><br>Applications of computational mathematics to industrial products and processes: the case of ABB                            |
| 11:45         | <b>Tamás Kis (Institute for Computer Science and Control, Budapest)</b><br>Production planning and scheduling in the digital factory  |
| 12:30 – 14:00 | – Lunch Break –   |
| 14:00         | <b>Zoltán Horváth, János Jósmai (Széchenyi István University, Győr)</b><br>Scheduling of production lines in automotive factories with the modeling, simulation and optimization technology |
| 14:45         | <b>Felix Damrath (Daimler AG, Ulm),<br/>Anton Strahilov (Rücker EKS GmbH, Weingarten)</b><br>Energy considerations in Virtual Commissioning   |
| 15:15         | <b>Ulrich Schmucker (Fraunhofer Institute for Factory Operation and Automation, Magdeburg)</b><br>About some mathematical aspects of virtual product development                            |
| 15:45 – 16:15 | – Coffee Break –  |
| 16:15         | <b>Rikardo Bueno (Tecnalia Research &amp; Innovation, San Sebastian)</b><br>The factories of the future roadmap   |
| 17:00         | <b>Jens Korell (Project Management Agency Karlsruhe)</b><br>Research topics factories of the future 2015  |
| 19:30 – 21:30 | Dinner  |

**Thursday, May 8**

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| 09:00         | <b>Simone Göttlich (University of Mannheim)</b><br>Modeling of material flow problems  |
| 09:45         | <b>Jörg Raisch (TU Berlin)</b><br>Optimal control of High-Throughput-Screening systems in a dioid framework  |
| 10:30 – 11:00 | – Coffee Break –   |
| 11:00         | <b>Fredrik Edelvik (Fraunhofer-Chalmers Centre, Gothenburg)</b><br>The virtual paint shop  |
| 11:45         | <b>Klaus Dreßler, Joachim Linn (Fraunhofer ITWM, Kaiserslautern)</b><br>Simulation for assembly-oriented design and digital validation of cables and hoses                         |
| 12:30 – 14:00 | – Lunch Break –  |
| 14:00         | <b>Chantal Landry (Weierstrass Institute, Berlin)</b><br>Automatic reconfiguration of robotic workcells  |
| 14:45         | <b>Wolfgang Welz (TU Berlin)</b><br>Combinatorial optimization aspects of robot tour planning  |
| 15:15         | <b>Konstantin Palagachev (Munich Aerospace/University of the Federal Armed Forces Munich, Neubiberg)</b><br>Switched system optimal control problems with applications to robotics |
| 15:45 – 16:15 | – Coffee Break –   |
| 16:15         | <b>Josef Prinz (inpro, Berlin)</b><br>Simulation and optimization of the transfer of thin flexible metal sheets in forming presses   |
| 16:45         | <b>Steen Markvorsen (Technical University of Denmark, Lyngby)</b><br>Hot wire cuttings for the building industries   |
| 17:15         | <b>Pavel Burget (Czech Technical University in Prague)</b><br>Simulation of idle-times energy savings on a welding line  |
| 17:45         | <b>Premysl Sucha (Czech Technical University in Prague)</b><br>Optimization of power consumption for robotic lines in automotive industry  |

**Friday, May 9**

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|---------------|--|
| 09:00         | <b>René Pinnau (TU Kaiserslautern)</b><br>The production of filaments and non-woven materials — the design of the polymer distributor  |
| 09:45         | <b>Markus Grebenstein (DLR, Wessling)</b><br>Compliant robots in automation: The impact of humanoid robotics on automation   |
| 10:30 – 11:00 | – Coffee Break –   |
| 11:00         | <b>Martin Krüger (Fraunhofer Institute for Production Technology IPT, Paderborn)</b><br>Model-based design of self-correcting forming processes                              |
| 11:30         | <b>Xavier David-Henriet (TU Berlin/University of Angers)</b><br>About closed-loop control and observability of max-plus linear systems: Application to manufacturing systems |
| 12:00         | Closing  |