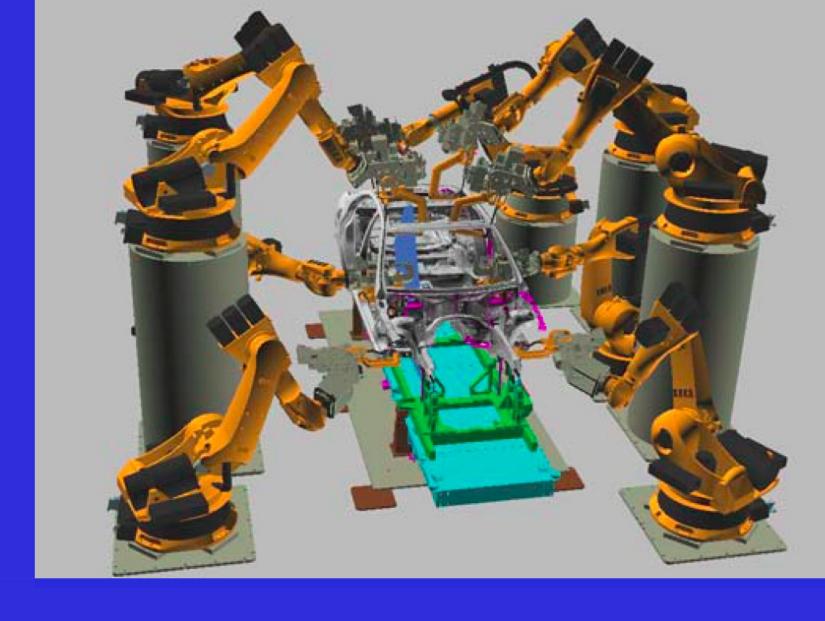


## KoMSO Challenge Workshop

# Math for the Digital Factory

May 7-9, 2014, WIAS Berlin



### OBJECTIVES

It is the kick-off meeting of the new ECMI Special Interest Group (SIG) on Digital Factories. The workshop aims at bringing together mathematicians working on modelling, simulation, and optimization with researchers and practitioners from manufacturing industry to develop a holistic mathematical view on digital manufacturing.

Topics of discussion include

- multibody and PDE systems of production processes
- discrete and continuous models of production planning
- multi-scale models of manufacturing chains
- models for energy consumption of machine tools and more complex production systems
- optimization strategies of energy and material efficient production

#### CONFIRMED SPEAKERS

Rikardo Bueno (Tecnalia, Spain)

Felix Damrath (Daimler AG, Germany)

Klaus Dreßler (Fraunhofer ITWM, Germany)

Fredrik Edelvik (Fraunhofer-Chalmers Centre, Sweden)

Luca Ghezzi (ABB, Italy)

Simone Göttlich (University of Mannheim, Germany)

Markus Grebenstein (DLR, Germany)

Zoltán Horváth (Széchenyi István University, Hungary)

János Jósvai (Széchenyi István University, Hungary)

Sándor Kálmán (AUDI, Hungary)

Tamás Kis (Institute for Computer Science and Control, Hungary)

Jens Korell, (NCP Production, Germany)

Joachim Linn (Fraunhofer ITWM, Germany)

Arndt Lüder (O. von Guericke University of Magdeburg, Germany)

René Pinnau (TU Kaiserslautern, Germany)

Josef Prinz (inpro, Germany)

Jörg Raisch (TU Berlin, Germany)

Aldo Sciacca (ABB, Italy)

Anton Strahilov (Rücker EKS, Germany)

Daniel Wolff (inpro, Germany)

Image courtesy of Rücker EKS GmbH



WHO SHOULD ATTEND

The workshop provides an extraordinary opportunity for academic researchers and practitioners to exchange views and ideas on Digital Factories. Research scientists will learn about new challenges in industrial manufacturing such as energy and resource efficiency or high performance production. Practitioners will discover the most recent mathematical models and concepts in large scale manufacturing.

In addition, we will have a session with representatives of the **MANUFUTURE** technology platform and the EU Industrial Technologies Programme (NMP) about funding opportunities within **Horizon 2020**.

#### REGISTRATION

We kindly ask you to register online at your earliest convenience, but not later than

#### **April 13, 2014**

A web form for registration and additional information on the workshop can be found on the conference web page (see below).

The registration fee of 50,00 € covers refreshment breaks, the conference dinner, and a booklet of abstracts.

#### ORGANIZERS

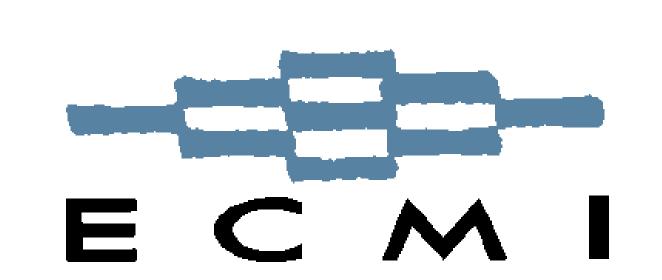
Matthias Gerdts (Universität der Bundeswehr München)

Dietmar Hömberg (WIAS and Technische Universität Berlin)

Volker Mehrmann (Technische Universität Berlin)

Martin Skutella (Technische Universität Berlin)

#### SPONSORS









Contact us: MaDiFa@wias-berlin.de

Further information: https://www.wias-berlin.de/workshops/MaDiFa/