

An event in English language organized by
French Embassy Berlin · TSB Technologiestiftung Berlin
DFG-Research Center MATHEON · Deutsche Mathematiker Vereinigung (DMV)

Invitation

Mathematics for Industry and Society

July, 4th / 5th 2013 · French Embassy Berlin · Wilhelmstraße 69 · 10117 Berlin

Mathematics has been and still is a tool that can be used in a wide variety of applications. In the recent two decades, though, mathematics has become an important factor in production. It has, in particular, a significant impact on industrial innovation cycles.

Today, mathematicians model, simulate, and optimize real-world processes that are present in many areas of industry and society. The influence of this methodology is especially strong in key technologies.

Due to their broad usability, the mathematical sub-fields of discrete mathematics, optimization, numerical and statistical analysis, scientific computing, and stochastic analysis have experienced considerable growth and are now employed to, for example, optimize various networks and train circulations, to develop models for quality assurance and to visualize large amounts of data. Some best practice examples are discussed at the conference.

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DFG-Forschungszentrum MATHEON
Mathematik für Schlüsseltechnologien



Deutsche
Mathematiker-Vereinigung

Programme

Mathematics for Industry and Society

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Thursday, July 4th

Friday, July 5th

14:00–16:00

Discover Maths in Berlin

When registering for the event, please select one of the following excursions: (a) Visit of 3-D-Lab at Technical University Berlin
(b) Mathematical Tour through the “Berliner Dom”

16:30–17:00

Registration & Coffee

17:00

Welcome Address

S. E. Maurice Gourdault-Montagne · Ambassador · French Embassy
Nicolas Zimmer · CEO · TSB Technologiestiftung Berlin

17:20–18:30

Moderation: Camille Roth · Centre Marc Bloch

Circulation of ICE-Trains

Prof. Dr. Ralf Borndörfer · Freie Universität Berlin

Circulation of Trains from Business Perspective

NN · Deutsche Bahn AG

Predicting and Improving Quality in Steel Industry

Clément Thery · Arcelor Mittal Dunkerque

Mathematics, Algorithms and Communication Networks

Prof. Philippe Robert · Inria Institut National de Recherche en Informatique et en Automatique

18:30

Keynote Lecture

How Maths Supports Industry

Prof. Dr. Dr. h.c. mult. Martin Grötschel · President · Zuse-Institut Berlin
DFG Research Center MATHEON

Reception

Time for Networking

Moderation: Prof. Dr. Dr. h.c. mult. Martin Grötschel

President · Zuse-Institut Berlin · DFG Research Center MATHEON

09:00–10:30

Optimizing Work Cells in Automotive Industry

Dr. Chantal Landry · Weierstrass-Institute for Applied Analysis and Stochastics

Mathematics for the Digital Factory

Prof. Dr. Dietmar Hömberg · Weierstrass-Institute for Applied Analysis and Stochastics

CGALmesh: A Generic Framework for

Delaunay Mesh Generation

Dr. Jean Daniel Boissonnat · Inria Institut National de Recherche en Informatique et en Automatique

Data Assimilation for Geophysical and Environmental Problems

Prof. Didier Auroux · University of Nice, Sophia Antipolis

10:30–11:00

Coffee Break

11:00–12:30

Proteome-based Cancer Diagnostics

Dr. Tim Conrad · Freie Universität Berlin
Dr. Joos-Hendrik Böse · SAP AG

Data Visualization: A New Paradigm

Prof. Nicolas Wicker · Lille University

12:30

Closing Remarks

Mathieu J. Weiss · Counsellor for Science and Technology · French Embassy

Lunch

End of Event & Departure