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# SILVER SPONSORS









Use your chance as a sponsor to be part of the technical exhibition. This is a great opportunity to present your products, processes and outputs to an interested audience focused on the topics of the simpulseday greenCAE. If you're interested, please don't hesitate to contact us. For more information about sponsoring possibilities please visit **www.greenCAE.com**.

## **EXHIBITION & SHOW CARS**

Visit our sponsors at the accompanying exhibition in the entrance hall and get in dialog with other experts. They will show you latest concepts and solutions.









In front of the hall you will also have the chance to see some green innovation show cars from the asc(s automotive OEM members.

### COOPERATION PARTNERS













MEDIA PARTNERS





## **EVENT LOCATION**

Strudelbachhalle Flachter Str. 60 | 71287 Weissach Germany



## **EVENT FEES**

€ 390.- for members of asc(s € 475.- for non-members of asc(s

The event fee excludes VAT.

Universities and public research institutes receive a 50% discount on the event fees.

## **BENEFITS**

- new impulses for R&D due to excellent expert lectures
- outside the box thinking due to outstanding keynote lectures
- networking with decision-makers and experts from industry and science
- active contribution in setting up a greenCAE strategy
- demonstration of latest solutions at the technical exhibition

### SIGN UP NOW

## www.greenCAE.com

# **ORGANIZER**

AUTOMOTIVE SIMULATION CENTER STUTTGART e.V. Ms. Natalia Schuchart
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# Mimpulse day greenCAE



Special Guest as Keynote-Speaker

Mr. Matthias Horx - a futurist with the topic:

## "Conquering Virtuality"

How Simulation Changed - and Will Change - Human Life.



• From simulations to movement.

## Simulation methods are pioneers of the mobility of the future.

They enable engineers to analyze highly complex interrelationships within the shortest possible time and to efficiently cope with hitherto unsolved problems. Even though this technology may play a pivotal role in the design of future mobility concepts, it is the impending challenges that are of major importance to society. Mobility is one of the central pillars in the inexorable striving of an ever-growing world population for more prosperity. Alternative drive concepts, resource efficiency and lightweight design, vehicle connectivity, data analysis and autonomous driving are trend-setting concepts to avoid a global collapse in the mobility sector. For this purpose, existing technology has to be linked – through technology transfer – to the latest achievements from the academic and business communities.

The peripheral conditions that arise from globalization require more than an adjustment of the final products. On the contrary, they call for a new way of thinking in the development process and the training of future engineers. Due to a consistent method development, innovative simulation methods together with the use of high-performance computing allow us to tap into as yet unused potential.

## **EVENT CONTENT**

With the simpulseday greenCAE the asc(s will put the focus on the significant contribution of state-of-the art computer technology on the way to environmentally friendly vehicles for an entire day. We want to highlight future challenges and build the bridge to the development of simulation methods. This event will be a cornerstone for the development of a greenCAE strategy, and the asc(s, being an internationally established interest group, will implement it in a responsible manner amongst its members in the years to come. The greenCAE strategy serves as a roadmap for outstanding project plans and innovative developments.

## **AUDIENCE**



The event's target audience are decision-makers in mobility and politics, development engineers, scientists and all interested parties in the field of virtual vehicle development.

## AGENDA

8:00 a.m.	Registration of the event guests - visit to the exhibition	
9:00 a.m.	Initial welcome and motivation   Alexander F. Walser   Managing Director asc(s	
9:15 a.m.	Welcoming address by political dignitary	
9:25 a.m.	KEYNOTE  "Simulation and Virtual Reality as Future Links between Customer & OEM"  Dr. Ulrich W. Schiefer  Managing Director   AtTrack GmbH	
9:55 a.m.	Fast-forward presentation exhibitors: solutions for greenCAE	
10:20 a.m.	Coffee break and visit to the exhibition	
11:00 a.m.	Session: Lightweight Design Chairman: DrIng. Andreas Wierse SICOS BW	Session: Alternative Drives Chairman: Luigi Zullo EMOBILITY EXPERTS
	Development of Light Weight Designs Using Simulation Based Optimization Prof. Dr. Lothar Harzheim Optimization and Robust Engineering Adam Opel AG	Honda Clarity Fuel Cell - a Contribution to Realize the Hydrogen Society <b>Thomas Brachmann</b> Automobile Powertrain & Material Research   Honda R&D Europe (Deutschland) GmbH
	Simulation Methods for Process Design of Structural Composite Components <b>Dr. Luise Kärger</b> KIT - Institute of Vehicle System Technology – Lightweight Technologies	Thermal Management for Alternative Drives Dr. Heike Schönerstedt Senior Manager Thermal Management Daimler AG
	World Café Lightweight Design	World Café Alternative Drives
12:30 p.m.	Lunch break and visit to the exhibition	
2:00 p.m.	Session: Autonomous Driving Chairman: Rainer Hoffmann carhs	Session: Data Analytics / HPC Chairman: DrIng. Martin Bernreuther HLRS
	Distance Perception in Driving Simulators  Dr. Hans-Peter Schöner  Senior Manager Driving Simulator,  Workshops and Testing  Daimler AG	Connecting HPC and Analytics in Automotive Design Greg Clifford Manufacturing Segment Manager Cray Inc.
	Simulation Driven Innovation for Autonomous Driving Dr. Markus Schick Director Electromagnetic Solutions - EMEA Altair Engineering GmbH	Machine Learning for Numerical Crash Simulations Prof. Dr. Jochen Garcke Head of Department Fraunhofer SCAI
	World Café Autonomous Driving	World Café Data Analytics / HPC
3:30 p.m.	Coffee break and visit to the exhibition	
	Podium & Summary of World Cafés	
4:15 p.m.	Podium & Summary of World Cafés	
	Podium & Summary of World Cafés  KEYNOTE  "Conquering Virtuality - How Simulation Chain  Matthias Horx, Futurist	nged - and Will Change - Human Life."
4:15 p.m.	KEYNOTE "Conquering Virtuality - How Simulation Cha	inged - and Will Change - Human Life."

#### **KEYNOTE**

### ..Simulation and Virtual Reality as Future Links between Customer & OEM"

Dr. Ulrich W. Schiefer Managing Director | AtTrack GmbH

worked with his expertise for BMW Formula 1, Aston Martin, Porsche Engineering Group





Prof. Dr. Lothar Harzheim Opel



Dr. Luise Kärger KIT FAST



Thomas Brachmann Honda R&D Europe



Dr. Heike Schönerstedt Daimler



Dr. Hans-Peter Schöner Daimler



Dr. Markus Schick Altair



**Greg Clifford** 



Prof. Dr. lochen Garcke FhG SCAI

### VISIONARY KEYNOTE by Matthias Horx, Futurist

### "Conquering Virtuality" How Simulation Changed - and Will Change - Human Life.

Since the beginning of culture human have used mental techniques of forecasting and simulation. Now in the digital age these technologies become widespread appliances in industries and economies. From simulating cities of the future until creating models for terroristic dangers, from anticipating building structures to space travel, virtualisation creates another "mind of possibilities". This speech circles around the cultural and mental impacts of simulation technologies and their acceptance in society.



Matthias Horx, Futurist Foto: Klaus Vyhnalek