12th Stuttgart International Symposium
Automotive and Engine Technology
13 and 14 March 2012 | Stuttgart | Germany
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<tr>
<th>Name</th>
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<td>Prof. Dr. Michael Bargende</td>
<td>FKFS/IVK, University of Stuttgart</td>
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<td>Wolfgang Hatz</td>
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<td>ANDREAS STIHL AG &amp; Co. KG</td>
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RESEARCH AND DEVELOPMENT IN AUTOMOTIVE AND ENGINE TECHNOLOGY

Automotive development is facing a number of challenges that require maximum effort and innovation in all areas of vehicle and powertrain technology. Mobility is in a state of fundamental change. Many different mobility concepts are now being presented both for passenger transportation and for goods traffic. Furthermore, developments in the automotive industry must meet the different expectations of customers from all over the world. The resulting diversification of the products together with the different types of electrification of the powertrain present the automotive industry with multi-dimensional complexity issues. In order to meet these challenges, the definition of key areas of development and the application of virtual development tools are indispensable. The bandwidth of different approaches is reflected in more than 80 papers being presented at the 12th Stuttgart International Symposium “Automotive and Engine Technology” on 13 and 14 March 2012.

As expected, the conference program will focus in particular on highly interesting scenario considerations. Presented by leading experts from industry and science, the papers at the symposium will cover the entire bandwidth of current future vehicle and engine technology, including topics relating to production and rail vehicles. The four parallel strands of the symposium will offer you an ideal opportunity to acquire information about future concepts, the latest research findings and, of course, the current state of the art in technology, and to discuss them with a circle of experts. A further possibility for an exchange of ideas is offered by the parallel trade exhibition. The keynote speakers from industry, research and politics as well as the concluding panel discussion will address issues of development focus in a globalized industry.

We look forward to seeing you in Stuttgart, the birthplace of the automobile, and wish you a pleasant journey here as well as a stimulating and interesting stay in Stuttgart.

Prof. Dr.-Ing. Michael Bargende
Prof. Dr.-Ing. Hans-Christian Reuss
Prof. Dr.-Ing. Jochen Wiedemann
The 12th Stuttgart International Symposium “Automotive and Engine Technology”, which takes place on 13 and 14 March 2012, clearly demonstrates the progress that has been made in this field and how future individual mobility might affect our lives. The largest event for automotive experts in southern Germany – organized by the Institute of Automotive Engineering and Vehicle Engines Stuttgart (FKFS) at the University of Stuttgart, in cooperation with ATZlive and supported by the specialist magazines ATZ and MTZ as media partners – will include more than 80 papers discussing all aspects of how better improvements in reducing fuel consumption and emissions can be achieved. The aim of optimizing the complete vehicle can only be attained if improvements to the powertrain are also supported by positive contributions from vehicle body engineering, including interior equipment, and the chassis.

For decades now, continuously higher safety and comfort requirements have resulted in a constant increase in body weight. The automotive industry is countering this trend with intelligent lightweight design concepts. Recently, things have become a little quieter concerning the electrification of individual transport, and what has often been an emotional discussion has now given way to a more objective consideration of the issue. Nevertheless, the Stuttgart Symposium will show that work on electrified powertrains has not disappeared into the desks of researchers and developers. Behind the scenes of the industry, quite the opposite is the case. Investment in new technologies such as hybrid and electric vehicles has been increasing year by year.

Experts are still intensively discussing what the car of the future might look like and which drive concepts will be successful in the long term. But one thing is certain: there will not be just one solution. Many different solutions for different requirements and different locations will continue to characterize road traffic in our globalized world. For that reason, I wish all participants at the Stuttgart Symposium a fertile and stimulating exchange of information and ideas, and I look forward to meeting you there.

Wolfgang Siebenpfeiffer
Editor-in-Charge ATZ | MTZ

Simultaneous interpreting in German/English and English/German is provided on both days of the symposium. The German version of the program is available at www.ATZlive.de or by calling +49 (0)611/78 78 – 131.
from 8:00 Registration

9:00 Welcome
Prof. Dr. Michael Bargende, Chairman of the FKFS Board of Management and Managing Director of the Institute for Internal Combustion Engines and Automotive Engineering (IVK), University of Stuttgart

Opening address
Prof. Dr. Wolfram Ressel,
Rector of the University of Stuttgart

9:15 Development trends for electric vehicles in China
Dr. Li Jun, Vice Chief Engineer, China FAW Group Corporation, President of R&D Center, FAW; FISITA President Elect

Concepts and requirements for large industrial engines of the future
Dr. Ulrich Dohle, Member of the Board, Tognum AG

The electrification of the propulsion system at General Motors – strategy, technology and products
Prof. Dr. Uwe-Dieter Grebe, Executive Director – Advanced Technology Work and Alternative Propulsion, General Motors Europe

10:30 Refreshment break with coffee and tea

11:00 Four parallel sections

12:30 Lunch together in the exhibition area

14:00 Four parallel sections

15:30 Refreshment break with coffee and tea

16:00 Four parallel sections

18:00 End of the parallel sections

19:00 Formal reception at the “Alte Stuttgarter Reithalle”

Welcome
Prof. Dr. Hans-Christian Reuss, Member of the FKFS Board of Management and Professor for Vehicle Mechatronics at the Institute for Internal Combustion Engines and Automotive Engineering (IVK), University of Stuttgart

Enjoy stimulating discussions with fellow participants and speakers in a relaxing atmosphere.
PROGRAM
TUESDAY 13 MARCH 2012

>> SECTION 1 König Karl Hall

E-MOBILITY AND BATTERY TECHNOLOGIES I
Chairman: Prof. Johann Tomforde

11:00 Electric mobility – transformation of the powertrain value chain and implications for OEMs and suppliers
Dr. Christian Malorny, Dr. M. Lindner, McKinsey & Company, Inc.

11:30 E-mobility – market assessment, challenges & solutions
Edmund Erich, Delphi Deutschland GmbH

12:00 E-mobility solutions for automotive and non-automotive applications
Heiko Weller, Bosch Engineering GmbH

12:30 Lunch together in the exhibition area

E-MOBILITY AND BATTERY TECHNOLOGIES II
Chairman: Prof. Werner Tillmetz

14:00 Smart charging – the intelligent vehicle-to-grid communication
Dr. Tim Schlüsener, W. Preuschoff, Daimler AG

14:30 Customer expectations and technical solutions for 3rd generation electric vehicles – first results of the ELVA project
Micha Lesemann, Forschungsgesellschaft Kraftfahrwesen mbH Aachen; M. Funcke, L. Ickert, Prof. Dr. L. Eckstein, ika, RWTH Aachen University

15:00 High power output and long range: combined energy storage for a plug-in hybrid vehicle
Jens Bockstette, M. Jäger, Prof. Dr. S. Pischinger, VKA, RWTH Aachen University; Dr. T. Hülschort, FEV GmbH

15:30 Refreshment break with coffee and tea

HYBRIDS
Chairman: Prof. Dr. Cornel Stan

16:00 Solutions for 50 g/km CO₂
Dr. Günter Fraidl, F. Beste, K. Küpper, M. Sattler, H. Sorger, M. Weißbäck, AVL List GmbH

16:30 Presentation of a methodical approach to configure a plug-in hybrid system based on existing data
Benedikt Nies, P. Kropf, Dr. T. Kell, BMW Group; Prof. Dr. U. Lindemann, TU Munich

17:00 Optimization of hybrid strategies with heuristic algorithms
Michael Planer, T. Krenek, Prof. Dr. T. Lauer, Prof. Dr. B. Geringer, IFA, TU Vienna; M. Zuschrott, Daimler AG

17:30 The plug-in hybrid between the conflicting demands of Euro VI and CO₂ targets
Carsten von Essen, M. Diezemann, F. Bunar, S. Adelberg, IAV GmbH

>> SECTION 2 Meidinger Room

DRIVING DYNAMICS
Chairman: Prof. Dr. Ansgar Trächtler

11:00 An innovative approach for stability assessment with respect to dynamic driving at the adhesion limit
Dr. Lars König, O. Wagner, L. Kaiser, Bosch Engineering GmbH

11:30 Development of a driver model for optimal control of a racecar
Timo Völkl, AUDI AG; Christopher Zinke, EFS GmbH; Prof. Dr. H. Winner, TU Darmstadt

12:00 Influence of tyre lateral characteristics on full-vehicle properties
Dr. Stefan Einsle, Dr. C. Schimmel, Dr. A. Wagner, AUDI AG

12:30 Lunch together in the exhibition area

VEHICLE SIMULATION
Chairman: Dr. Gerhard Hettich

14:00 Energy-efficient vehicle operation by intelligent longitudinal control and route planning
Dr. Michael Henn, Dr. T. Lösche-ter Horst, F. Schulze, Dr. P. Bartsch, A. Gadanecz, Dr. L. Jung, Volkswagen AG

14:30 Concept of a new hardware in the loop driving simulator for the model-based design of mechatronic steering systems
Steffen Stauder, Prof. Dr. S. Müller, MEC, TU Kaiserslautern; M. Plöger, A. Lehmann, dSPACE GmbH

15:00 The new driving simulator of the University of Stuttgart
Dr. Gerd Baumann, T. Riemer, FKFS; Dr. A. Piegsa, C. Liedecke, P. Rumbolz, A. Schmidt, IVK, University of Stuttgart

15:30 Refreshment break with coffee and tea

THERMAL MANAGEMENT
Chairman: Franz Loogen

16:00 e performance – more range with thermal management
Carl Bohman, Bosch Engineering GmbH

16:30 Thermal simulation of a battery electric vehicle
Markus Auer, Prof. Dr. J. Wiedemann, Prof. Dr. H.-C. Reuss, IVK, University of Stuttgart; Dr. T. Kuthada, Dr. M. Grimm, FKFS; S. Krug, ZSW BW

17:00 Effects of new air conditioning concepts on the CO₂ emission of vehicles with a conventional powertrain
Jan Ackermann, IAV GmbH

17:30 Lightweight components with an adjustable thermal interface for battery cooling
Dr. Achim Wiebelt, S. Hirsch, C. Schmid, Dr. T. Heckenberger, Behr GmbH & Co. KG
SECTION 3  Bertha Benz Room

**DIESEL ENGINES I**
Chairman: Prof. Dr. Stefan Pischinger

11:00  Non-road mobile machinery emission strategies and resulting requirements for SCR systems  
Dr. Hartmut Lüders, M. Burger, M. Krüger, F.-J. Trompeter, Robert Bosch GmbH

11:30  Impact of biodiesel fuel (RME) on the PM deposition of particulate filters  
Dr. Panayotis Dimopoulos Eggenschwiler, A. Liati, Empa Swiss Federal Laboratories for Materials Testing and Research

12:00  Optimized DPF regeneration performance utilizing a model-based injection management approach  
Joschka Schaub, Prof. Dr. S. Pischinger, VKA, RWTH Aachen University; Dr. T. Schnorbus, Dr. C. Severin, A. Kolbeck, T. Körfer, FEV GmbH

12:30  Lunch together in the exhibition area

**AERODYNAMICS**
Chairman: Stephan Kopp

14:00  The aerodynamic development of the new Actros from Mercedes-Benz Trucks  
Thorsten Frank, Daimler AG

14:30  Impact of wheel rotation on aerodynamic drag and lift  
Satheesh Kandasamy, H. Gau, F. Maroy, A. Belanger, Exa; Dr. N. Grün, Dr. S. Schäufele, BMW Group

15:00  Active flow control: simulation of pulsed jets on an Ahmed bluff body  
Dr. Elisabeth Fournier, Dr. P. Gillieron, RENAULT Technocentre

15:30  Refreshment break with coffee and tea

**DIESEL ENGINES II**
Chairman: Prof. Dr. Peter Elits

16:00  Strategies for closed loop control of glow plug surface temperature  
Dr. Olaf Toedter, Dr. M. Sackmann, Dr. M. Eberhardt, Dr. J. Hammer, BorgWarner BERU Systems GmbH; R. Suteekarn, DTSGlobal GmbH; I. Demirdelen, Prof. Dr. F. Puente, IIIT, Karlsruhe Institute of Technology

16:30  Fuel-in-oil detection strategy by an oil quality sensor  

17:00  Reduction of emission variance by intelligent air path control  
Dr. Thorsten Schnorbus, Y. Hu, J. Schaub, A. Kolbeck, T. Körfer, FEV GmbH

17:30  Cylinder charge-based injection control for diesel engines  
Nils Arnold, H. Henning, I. Kutschera, AUDI AG; Prof. Dr. M. Bargende, IVK, University of Stuttgart

SECTION 4  Reutlingen Room

**RAILWAY VEHICLES I**
Chairman: Prof. Dr. Dieter Bögle

11:00  Methodology for creating load-adapted car body structures and its implementation in a car body segment  
Jens König, G. Kopp, Prof. Dr. H. E. Friedrich, Institute for Vehicle Concepts, DLR e. V.; Dr. M. Schön, Bombardier Transportation

11:30  Current developments in railway maintenance  
Dr. Burkhard Schulte-Werning, Dr. I. Trockels, H. Hintze, Dr. K. Madler, F. Wolf, DB Systemtechnik, Deutsche Bahn AG

12:00  Trams are electrifying modern cities  
Ulf Braker, Stadler Pankow GmbH

12:30  Lunch together in the exhibition area

**RAILWAY VEHICLES II**
Chairman: Thomas Moser

14:00  COMORAN – Condition Monitoring for Railway Applications – as an integral part of a brake control and wheel slide protection system  
Ulf Friesen, Dr. J.-J. Wach, M.-O. Herden, Knorr-Bremse Systems for Rail Vehicles

14:30  Micro-pressure waves – a high-speed railway phenomenon  
Michael Hieke, DB Systemtechnik, Deutsche Bahn AG

15:00  Development of stage IIIB diesel engines for railcars to integrate into new and existing vehicles  
Andreas Wegmann, Voith Turbo GmbH & Co. KG

15:30  Refreshment break with coffee and tea

**E/E ARCHITECTURE**
Chairman: Prof. Dr. Jörn-Uwe Varchmin

16:00  An approach of a contract-based electric-electronic architecture  
Bernhard Schmidt, TraceTronic GmbH

16:30  Configurable LIN, CAN, FlexRay gateway for vehicle use  
Sergei Gontscharov, F. Hühn, Prof. Dr. K.-L. Krieger, ITEM, University of Bremen

17:00  Challenges for implementing standardized SW architectures in 8- and 16-bit environments  
Dr. Peter Kappelmann, U. Löhnert, R. Moritz, Robert Bosch GmbH

17:30  Development and analysis of on-board power systems using multidiscipline simulation  
Emanuel Bory, LMS Deutschland GmbH; N. Kieny, LMS Imagine; E. Laurain, Renault S.A.
## E-MOBILITY AND BATTERY TECHNOLOGIES III
### Chairman: Prof. Karl-Ernst Noreikat

**8:30**
*Importance of standards for electric vehicles*
Jochen Thym, time4e; E. Stolz, park & charge

**9:00**
*New concepts for energy storages in an electric vehicle – battery modules which enunciate the power generation!*
Daniel Holder, Prof. Dr. T. Maier, IKTD, University of Stuttgart

**9:30**
*Dynamic simulation of a high-voltage traction battery*
Sina Krug, R. Kuhn, M. Danzer, ZSW BW; M. Auer, Prof. Dr. J. Wiedemann, IVK, University of Stuttgart

**10:00**
**Refreshment break with coffee and tea**

### SI ENGINE
### Chairman: Prof. Dr. Helmut Eichlseder

**10:30**
*Freedom in Formula Student – constraints in Formula 1*
Prof. Dr. Friedrich Indra

**11:00**
*Variable-length intake manifold for turbocharged engines*
Jürgen Stehlig, MAHLE Filtersysteme GmbH; R. Dingelstadt, MAHLE International GmbH; J. Taylor, D. Gurney, MAHLE Powertrain Ltd.

**11:30**
*Electronically controlled and battery-less injection system for small two-stroke SI engines*
Arno Kinnen, W. Layher, H. Däschner, ANDREAS STIHL AG & Co. KG

**12:00**
**Lunch together in the exhibition area**

## POWERTRAIN CONCEPTS
### Chairman: Prof. Dr. Nejila Parspour

**13:30**
*Comparison of different methods for efficiency improvement of the electric drive-train*
Prof. Dr. Dieter Gerling, K. Mühlbauer, EAA, Universität der Bundeswehr München; Dr. G. Dajaku, FEAM GmbH

**14:00**
*E-axle module for electric vehicles and axle hybrids*
Dr. Bernd Vahlensieck, P. Casals, ZF Friedrichshafen AG

**14:30**
*Comparison of the applicability of a transverse flux reluctance machine and a transverse flux permanent magnet excited machine on utility vehicles*
Peter Seibold, M. Gärtner, F. Schuller, Prof. Dr. N. Parspour, IEW, University of Stuttgart

## VEHICLE ACOUSTICS AND VIBRATION I
### Chairman: Prof. Dr. Lutz Eckstein

**8:30**
*Sound characteristic of electric vehicles – perception and impact*
Maren Hawighorst, P. Teller, Fraunhofer Institute for Building Physics IBP

**9:00**
*Reduction of synchronization time in automated transmissions for heavy-duty trucks by systematically induced drive train oscillations*
Daniel Kuncz, Prof. Dr. H.-C. Reuss, FKFS; M. Guggolz, D. Ulmer, Dr. J. Koch, Daimler AG

**9:30**
*Establish Procedure to avoid judder by effective gearbox design*
Jan Deleeener, LMS International; Y. Ooi, H. Tsuji, Aisin AW

**10:00**
**Refreshment break with coffee and tea**

## VEHICLE TECHNOLOGY I
### Chairman: Prof. Dr. Horst E. Friedrich

**10:30**
*Design variety and lightweight design constraints in passenger car body production*
Klaus Wurster, Prof. Dr. M. Liewald, IFU, University of Stuttgart; Dr. K.-H. Füller, Daimler AG

**11:00**
*Development of vehicle body components relevant for side impact and assessment of the achieved occupant safety*
Dr. Jovan Obradovic, G. Belingardi, Politecnico di Torino; E. Ertugus, ika, RWTH Aachen University

**11:30**
*Complex geometric integration of chassis components. Virtual clearance validation in the early development phase.*
Sebastian Kokot, D. Berkam, BMW AG; Prof. Dr. M. Kröger, IMFK, TU Freiberg

**12:00**
**Lunch together in the exhibition area**

## VEHICLE TECHNOLOGY II
### Chairman: Prof. Dr. Horst E. Friedrich

**13:30**
*One cm more or less – who cares?*
Rainer E. Grünen, Adam Opel AG

**14:00**
*Analysis and compensation of rotor position signal disturbances in electric drives up to the field weakening region*
Eugen Sworowski, T. Pötzl, ZF Lenksysteme GmbH; Prof. Dr. H.-C. Reuss, IVK, University of Stuttgart

**14:30**
*Influence of the battery system on the static and dynamic properties of battery electric vehicles underfloor structure*
Collins Ntchouzou Nganko, Dr. J. W. Meschke, Volkswagen AG; Prof. Dr. T. Vietor, IKT, TU Braunschweig
MATERIALS AND LIGHTWEIGHT CONSTRUCTION
Chairman: Prof. Dr. Eberhard Roos

8:30 It depends on the material – aluminium connecting rods
Dr. Jambolka Brauner, Dr. R. Leiber, Leiber Group GmbH & Co. KG; Dr. U. Philipp, B. Burger, IVK, University of Stuttgart

9:00 Function integration at fiber-reinforced structures at an example of the project “Active Lightweight Suspension”
Oliver Deißer, Prof. Dr. H. E. Friedrich, Dr. A. Hölderlin, Institute for Vehicle Concepts, DLR e. V.

9:30 Discontinuously reinforced light metals for automotive applications
Martin Wenzelburger, GSaME; M. Silber, Prof. Dr. R. Gadow, IFKB, University of Stuttgart

10:00 Refreshment break with coffee and tea

AUTOSAR
Chairman: Prof. Dr. Karl-Ludwig Krieger

10:30 Deployment of the AUTOSAR software architecture at Daimler
Dr. Stefan Schmerler, Dr. C. Kühn, Daimler AG

11:00 Driving dynamics simulation: space-segment model to evaluate GPS/INS fusion architectures
Tobias Butz, U. Wurster, IPG Automotive GmbH; Prof. Dr. G. F. Trommer, M. Wankerl, ITE, Karlsruhe Institute of Technology

11:30 A virtual validation platform for AUTOSAR software
Nico Maldener, Dr. U. Freund, Dr. D. Ziegenbein, M. Ebert, ETAS GmbH

12:00 Lunch together in the exhibition area

SIMULATION TOOLS
Chairman: Prof. Dr. Klaus D. Müller-Glaser

13:00 Simulation-based homologation of ESC systems according to ECE-R 13-H
Dr. Henning Holzmann, K. M. Hahn, F. Weyer, M. Römer, Adam Opel AG; J. Webb, S. Bolthausen, A. Català, G. Tosolin, IDIADA Automotive Technology SA

13:30 Perspectives and requirements for the standard implementation of HiL simulation in the calibration of engine management control units
Marcel Richter, Robert Bosch Engineering GmbH; M. Boumans, I. Hein, Robert Bosch GmbH

14:00 Condition monitoring and fault diagnosis of electric machines for automotive application
Eduard Bakhach, B. Rehfsus, Daimler AG; Prof. Dr. C. Gühmann, TU Berlin

14:30 High-speed ECU measurement concept in combination with real-time bypassing for an EV/HEV engine
Alfred Kless, Vector Informatik GmbH

REPORTS FROM FVV PROJECTS
Chairman: Dr. Karl Kollmann

8:30 Phenomenological model for simulation of homogenous and partly homogenous diesel combustion
Dominik Rether, Prof. Dr. M. Bargende, IVK, University of Stuttgart; Dr. C. Lämmlie, Prof. Dr. K. Boulouchos, LAV, ETH Zurich

9:00 Development of a gas discharge system for the crankshaft-resolved discharge of oil emissions from the combustion chambers of diesel engines
Prof. Dr. Gerhard Matz, A. Behn, Institute of Measurement Technology, TU Hamburg-Harburg

9:30 An improved approach for calculating non-steady-state wall heat losses during HCCI combustion
Moritz Heinle, Prof. Dr. M. Bargende, IVK, University of Stuttgart; H.-J. Berner, FKFS

10:00 Refreshment break with coffee and tea

PRODUCTION ENGINEERING
Chairman: Prof. em. Dr. Engelbert Westkämper

10:30 Effects of future mobility on automotive production
Steven Peters, Prof. Dr. G. Lanza, wbk Institute of Production Science, Karlsruhe Institute of Technology

11:00 Industrialization of the electric drivetrain for the BMW ActiveE
Dr. Frank Möbius, Dr. J. Merwerth, E. Hockgeiger, BMW AG

11:30 Numerical calculation of thermal manufacturing processes for product and process optimization of car body structures in the pre-series phase
Christoph Albiez, Prof. Dr. M. Liewald, IFU, University of Stuttgart; A. Görrès, Dr. M. Sindel, AUDI AG

12:00 Lunch together in the exhibition area

VEHICLE ACOUSTICS AND VIBRATION II
Chairman: Prof. Dr. Frank Gauterin

13:30 Micro-perforated absorber to reduce the tire cavity mode
Wolfgang Herget, Dr. P. Brandstädt, Fraunhofer Institute for Building Physics IBP

14:00 Model-based calibration of a load change reaction control function with hybrid state space models
Julien Pillias, Dr. F. Kirschbaum, Daimler AG

14:30 Development of NVH comfort exemplified on the Mercedes-Benz M-Class
Dr. Detlef Schulze-Fehrenbach, H.-P. Reifenrath, A. Schlip, B. Zobec, Daimler AG
8:30  Four parallel sections

10:00  Refreshment break with coffee and tea

10:30  Four parallel sections

12:00  Lunch together in the exhibition area

13:00  Four parallel sections

15:00  Refreshment break with coffee and tea

15:30  Panel discussion

   Focus of development in a globalized world

   Introductory presentation:
   Prof. Dr. Heinz K. Junker, Chairman
   of the Management Board, MAHLE GmbH

   Participants:
   Peter Mertens, Senior Vice President
   Research & Development, Volvo Car Corporation
   Prof. Dr. Leopold Mikulic,
   Vice President Cooperation Coordination
   Renault/Nissan, Daimler AG
   Harald Wester, CEO, Alfa Romeo Automobiles

   Moderator:
   Johannes Winterhagen, Editor-in-Chief ATZ

16:30  Keynote speech

   Silke Krebs, Minister of state of the
   state of Baden Wuerttemberg

16:45  Closing remarks

   Prof. Dr. Jochen Wiedemann, Member of the FKFS
   Board of Management and Professor for Automotive
   Engineering at the Institute for Internal Combustion
   Engines and Automotive Engineering (IVK),
   University of Stuttgart

17:00  Conference ends
EXHIBITION

Tuesday 13 March 2012, Wednesday 14 March 2012

On Tuesday 13 March and Wednesday 14 March, a parallel trade exhibition will once again be held in the foyers of the conference venue. The automotive manufacturers and suppliers to the automotive industry will present the latest developments in vehicle and engine technology and metrology to an informed specialist audience.

YOUR PRESENTATION PLATFORM

Take the opportunity to present your latest products and services to the specialist audience as a supplier in our exclusive exhibition or as a sponsor.

Why not make use of this meeting place for an exchange of specialist information between users and pioneers in this field?

We design individual sponsoring and exhibition packages according to your needs and requirements. You can choose from a wide range of options.

For information on the various presentation options, please contact:
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Phone +49 (0)6242 / 990565
kai.pielicke@ap-media.eu

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ANDREAS STIHL AG & Co. KG

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Tognum-Gruppe
Vector Informatik GmbH
ZF Friedrichshafen AG

List of Exhibitors – Stuttgart Symposium 2011
SPEAKERS, MEMBERS OF THE SCIENTIFIC ADVISORY BOARD, CHAIRMEN

Jan Ackermann
IAV GmbH

Christoph Albiez
IFU, University of Stuttgart

Nils Arnold
AUDI AG

Markus Auer
IVK, University of Stuttgart

Eduard Bakhach
Daimler AG

Prof. Dr. Michael Bargende
FKFS/IVK, University of Stuttgart

Dr. Gerd Baumann
FKFS

Jens Bockstette
VKA, RWTH Aachen University

Prof. Dr. Dieter Bögle
Carl Bohman
Bosch Engineering GmbH

Emanuel Bory
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