

chassis.tech plus 2022

4 congresses in one event

5 – 6 July 2022

Munich, Germany

or virtually via live stream

chassis.tech_{plus}

chassis.tech

steering.tech

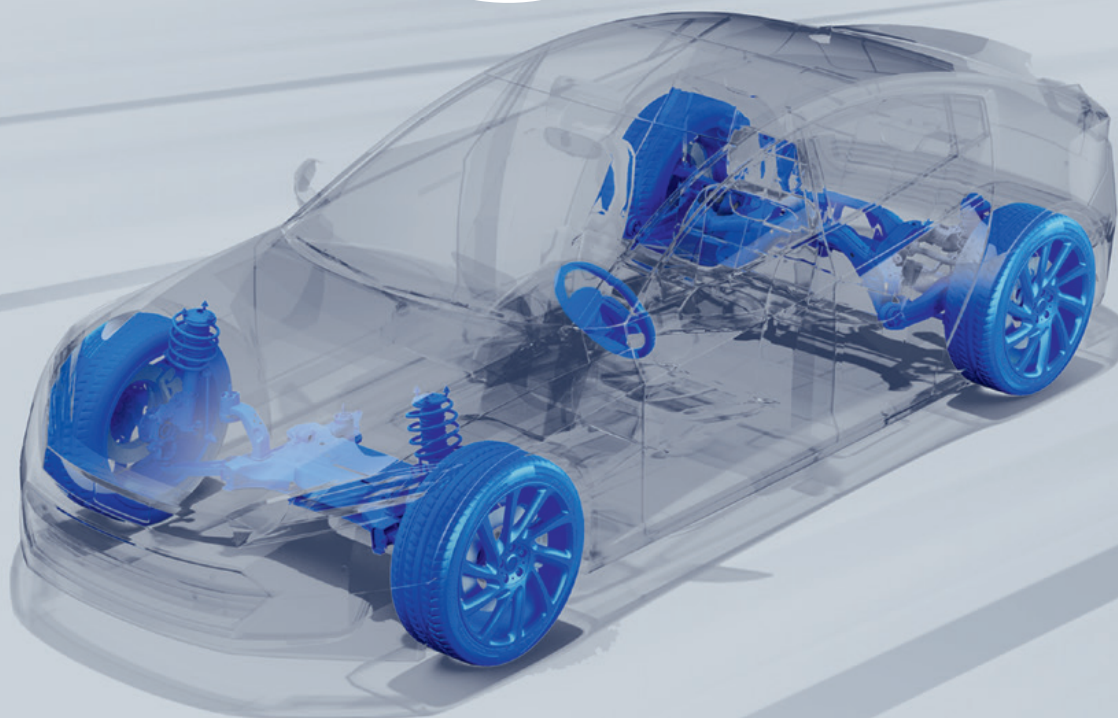
brake.tech

tire.wheel.tech

Hybrid event

Your choice:

Participate on-site
or virtually via
live stream



KEYNOTE LECTURES

ADAC e.V. / Continental Teves AG & Co. oHG / Ducati Motor Holding s.p.a. /
Karlsruhe Institute of Technology (KIT) / Robert Bosch GmbH / S&P Global Mobility



ONE FOR ALL

4 congresses in one event

/ chassis.tech plus

Optimization of the chassis for the challenges of automated driving, vehicle dynamics, and comfort

Calibration of chassis functions using virtual methods, testing solutions, and road tests

/ chassis.tech

Redundant chassis systems, the driver, and the vehicle in the focus of development concepts and security

/ steering.tech

New steering systems for steer-by-wire and digital twins

/ brake.tech

Modern brake systems in harmony with environmental aspects and excellent driving characteristics

/ tire.wheel.tech

Efficient tire/wheel systems for reduced tire wear and greater range



Prof. Dr. Peter E. Pfeffer
Hochschule München University of Applied Sciences
Scientific Director of the Symposium

Welcome

In the triad comprising the driver, the vehicle, and the chassis, it is the latter that is the decisive factor when it comes to achieving the optimum values in terms of driving safety, sportiness, and comfort. In addition, trends such as automated driving and powertrain electrification will have further repercussions on chassis architectures. This Herculean task can only be mastered by interdisciplinary teams of engineers who see the chassis as a complete system and work on it accordingly. The process is supported by agile development methods and computer simulations as well as driving simulators and real road tests – for both current and future systems.

The 13th International Munich Chassis Symposium chassis.tech plus once again aims to bring together up to 500 specialists for an exchange of ideas and experience. Experts in suspension systems, steering, brakes and tires/wheels, as well as ADAS will find the very latest information and will have the opportunity to discuss current developments in detail.

You can look forward to keynote lectures by Dr. Hans-Jörg Feigl (Continental), Helge Westerfeld (Bosch), Patricio Barbale (S&P Global Mobility), and Andreas Rigling (ADAC) on the first day of the symposium, as well as short interviews with leading experts. On the second day, Prof. Dr. Frank Gauterin (Karlsruhe Institute of Technology) and Leonardo Bagnoli (Ducati) will present their valuable assessments.

We look forward to welcoming you to the Bayerischer Hof in the center of Munich or virtually via our live stream and hope you have an exciting and informative conference.

Stay at the cutting edge!

- ✓ Highly relevant technical papers presented by renowned speakers
- ✓ Networking in the international expert community
- ✓ Innovative products and services

13TH INTERNATIONAL MUNICH CHASSIS SYMPOSIUM

The choice is yours: attend on-site or virtually via live streams of all sessions.

One for all – 4 congresses in one event

The International Munich Chassis Symposium with its accompanying trade exhibition is the key worldwide meeting place for the chassis community in the fields of the chassis, steering, brakes, and tires/wheels.

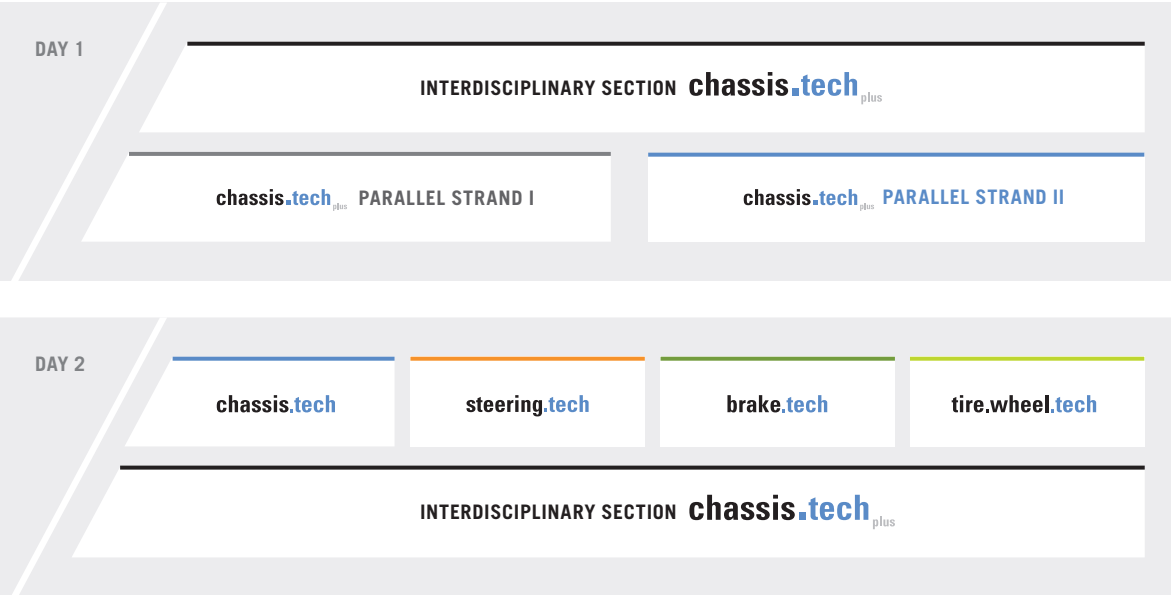
The 1st day will be taken up by the interdisciplinary section chassis.tech plus with two parallel sessions of lectures in the afternoon.

The symposium will focus on overriding issues relating to chassis systems and vehicle dynamics, before dividing up on the 2nd day into the following four parallel sections concentrating on the chassis, steering, brakes, and tires/wheels:

- chassis.tech
- steering.tech
- brake.tech
- tire.wheel.tech

In the afternoon, the parallel sections will merge together again for the interdisciplinary section chassis.tech plus.

In 2022, the symposium will focus on redundant chassis systems for automated driving, digital developments for steer-by-wire systems, and methods for measuring brake and tire wear. It will examine ways to ensure the long-term fulfillment of the increasing demands of customers, users, and legislation regarding agility and comfort as well as the requirements of sustainability and the environment, including more engineering efficiency and cost-effectiveness.



Accompanying trade exhibition on both days

Accompanying exhibition

Throughout the entire conference, the accompanying exhibition will take place in the foyers on-site and virtually in the digital event platform. Manufacturers and suppliers from the automotive industry will present innovative products and services in the field of chassis technology to the specialist audience.

Participants

- Manufacturers of passenger cars and commercial vehicles and their suppliers
- Development service providers
- Universities and research institutes
- Manufacturers of measuring, testing, and simulation systems
- Authorities, associations, and testing institutes

Your Corona protection concept



In order to ensure that the ATZlive conference is safe and successful for all participants, even in times of Corona, we have drawn up a wide-ranging hygiene protection concept and are making detailed arrangements with the event partners.

If you would prefer to participate virtually in the event for health reasons or due to travel restrictions, we will offer you also this year parallel live streams.

chassis.tech plus 2022 as a hybrid event

The choice is yours: attend on-site or virtually via live streams

The streaming package includes the keynote lectures and all lectures of the two parallel strands on the 1st day as well as the four parallel sections on the 2nd day as live streams.



The digital event platform offers you

- Q&A feature in the live streams
- 1:1 video chats with attendees, exhibitors, and speakers
- live polls
- your personal program overview
- a virtual exhibition
- all available conference documents in one place for download
- as well as other useful functions

Evening reception in Munich Ratskeller

Tuesday, 05-07-2022 from 18:30 in Munich Ratskeller, Marienplatz 8, 80331 Munich

Experience a cosy evening in the traditional Ratskeller. We are happy to invite you to attend an evening of stimulating conversation with colleagues and to offer you the chance to enjoy Bavarian culinary delicacies.

In accordance with the Romantic spirit of the age, Georg von Hauberisser designed the edifice as well as the furnishings of the Ratskeller in the 16th-century Gothic style. Munich painters such as Heinrich Schlitt and Josef Rösl designed the various vaults.

The foundation stone of the Ratskeller was laid on 25 August 1867. However, the first landlord and landlady did not move into the premises of the new town hall until 1 August 1874, the date when the city council started its activities there.

The Ratskeller, established ever since then as a place of civic hospitality, extends a hearty welcome with its typical Bavarian charm.





Prof. Dr. Peter E. Pfeffer
Hochschule München
University of Applied Sciences

Scientific Director of the Symposium,
Head of chassis.tech plus section



Dr. Alexander Heintzel
Editor-in-Chief
ATZ | MTZ Group,
Springer Nature



Michael Reichenbach
Vice Editor-in-Chief ATZ,
Springer Nature

Our four Scientific Advisory Boards, which are made up of prominent figures from the relevant field, provide support during the planning phase of the conference and help to identify suitable topics.

chassis.tech



Martin Schwarz
BMW Group
Head of chassis.tech section

steering.tech



Dr. Christoph Bittner
Dr. Ing. h.c.F. Porsche AG
Head of steering.tech section

brake.tech



Alexander Gaedke
Robert Bosch GmbH
Head of brake.tech section

tire.wheel.tech



Ralf Schweizer
AUDI AG
Head of tire.wheel.tech section

Egbert Bakker
Volvo Car Group, Sweden

Klaus Baltruschat
TÜV SÜD Product Service GmbH

Prof. Dr. Lutz Eckstein
RWTH Aachen University

Friedrich Eichler
Volkswagen de México, S.A. de C.V., Mexico

Dr. Christoph Elbers
ZF Group

Dr. Christian Hartweg
Opel Automobile GmbH

Prof. Hideo Inoue
Kanagawa Institute of Technology, Japan

Thomas Kutsche
ZF Group

Heinz Müllner
MAN Truck & Bus SE

Prof. Bernhard Schick
Kempten University of Applied Sciences

Timo Schöning
Hyundai Motor Europe Technical Center GmbH

Daniel Alt
Joyson Safety Systems
Aschaffenburg GmbH

Thilo Bitzer
ZF Group

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Mercedes-Benz AG

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Nexteer Automotive Germany GmbH

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TU Vienna, Austria

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Liechtenstein

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Hitachi Asterno, Ltd., Japan

Prof. Dr. Eberhard Drechsel
formerly Hochschule München
University of Applied Sciences

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Tobias Linke
MAN Truck & Bus SE

Prof. Dr. Giampiero Mastinu
Politecnico di Milano, Italy

Prof. Dr. Ralph Mayer
TU Chemnitz

Alexander Prahst
Dr. Ing. h.c. F. Porsche AG

Dr. Albert Schlecht
AUDI AG

Dr. Ralf Stroph
BMW Group

Prof. Dr. Rüdiger Tiemann
htw saar

Dr. Thorsten Ullrich
Continental Teves AG & Co. oHG

Stephane Bertoldi
Michelin Reifenwerke AG & Co. KGaA

Stefan Dittmar
TÜV SÜD Product Service GmbH

Ralf Duning
Maxion Wheels EAAP Holding GmbH

Prof. Dr. Frank Gauterin
Karlsruhe Institute of Technology (KIT)

Prof. Patrick Gruber
University of Surrey, UK

Klaus Krause
Hankook Tire Co. Ltd.

Prof. Dr. Günter Leister
tire.wheel.mobility solutions

Michael Staude
TÜV SÜD Product Service GmbH

Edwin van der Stad
Nexen Tire Europe s.r.o

Prof. Dr. Andreas Wagner
University of Stuttgart

Prof. Dr. Burkhard Wies
Continental Reifen Deutschland GmbH

Prof. Dr. Makoto Yamakado
Kanagawa Institute of Technology, Japan

Keynote lectures

In their keynote lectures, renowned speakers from the industry will provide forward-looking insights that go beyond the technical contents and illuminate the current issues from many different perspectives. In this way, the lectures, with their international focus, will be particularly important as a trend barometer for the conference.

TUESDAY, 05-07-2022 / MORNING / FESTSAAL



KEYNOTE
09:30

Dr. Hans-Jörg Feigel
Senior Vice President
Strategy & Future Solutions,
Continental Teves AG &
Co. oHG

Future chassis systems:
evolution or revolution?



KEYNOTE
10:00

Helge Westerfeld
Project Director
Vehicle Dynamics Control,
Robert Bosch GmbH

Integrated vehicle dynamics control –
opening up new dimensions



KEYNOTE
11:15

Patricio Barbale
Senior Analyst,
S&P Global Mobility, Italy

Impacts of megatrends on chassis systems



KEYNOTE
11:45

Andreas Rigling
Project Manager,
Vehicle Safety,
ADAC e.V.

Latest rating updates for ADAS systems

WEDNESDAY, 06-07-2022 / AFTERNOON / FESTSAAL



KEYNOTE
15:30

Prof. Dr. Frank Gauterin
Spokesperson of Directors
of the Institute of Vehicle
System Technology
(FAST) at KIT, Scientific
Spokesperson KIT Mobility
Systems Center, Karlsruhe
Institute of Technology (KIT)

Silence, please! – What we need to do
about vehicle noise emissions now



KEYNOTE
16:00

Leonardo Bagnoli
Head of
Vehicle Simulation Dept.,
Ducati Motor
Holding s.p.a., Italy

Virtual assessment of motorcycle stability
and comfort behavior and its influence on
chassis design



08:00 Registration at the check-in

09:15 **Welcome and opening**
Dr. Alexander Heintzel, Editor-in-Chief ATZ | MTZ Group, Springer Nature;
Prof. Dr. Peter E. Pfeffer, Automotive Engineering, Hochschule München
University of Applied Sciences

09:30 – 10:30, Plenary section – Festsaal

KEYNOTE LECTURES I

Moderation: Prof. Dr. Peter E. Pfeffer, Automotive Engineering,
Hochschule München University of Applied Sciences

KEYNOTE
09:30 **Future chassis systems: evolution or revolution?**
Dr. Hans-Jörg Feigel, Senior Vice President Strategy & Future Solutions,
Continental Teves AG & Co. oHG

KEYNOTE
10:00 **Integrated vehicle dynamics control – opening up new dimensions**
Helge Westerfeld, Project Director Vehicle Dynamics Control, Robert Bosch GmbH

10:30 Opening of the accompanying trade exhibition and refreshment break in the exhibition area

11:15 – 12:15, Plenary section – Festsaal

KEYNOTE LECTURES II

Moderation: Prof. Dr. Peter E. Pfeffer, Automotive Engineering,
Hochschule München University of Applied Sciences

KEYNOTE
11:15 **Impacts of megatrends on chassis systems**
Patricio Barbale, Senior Analyst, S&P Global Mobility, Italy

KEYNOTE
11:45 **Latest rating updates for ADAS systems**
Andreas Rigling, Project Manager, Vehicle Safety, ADAC e.V.

12:15 – 12:45, Plenary section – Festsaal

SHORT INTERVIEWS WITH EXPERTS OF THE INDUSTRY

Moderation: Dr. Alexander Heintzel, Editor-in-Chief ATZ | MTZ Group, Springer Nature

Experts:
Dr. Hans-Jörg Feigel, Senior Vice President Strategy & Future Solutions,
Continental Teves AG & Co. oHG
Dr. Dirk Herkenrath, Manager Chassis Design, Mercedes-Benz AG
Timo Schöning, Head of Department Chassis, Hyundai Motor Europe
Technical Center GmbH

12:45 Lunch in the exhibition area

PARALLEL STRAND I

14:15 – 15:45, Parallel strand I – Festsaal

REDUNDANT SYSTEMS AND TESTING

Moderation: Timo Schöning, Head of Department Chassis,
Hyundai Motor Europe Technical Center GmbH

14:15 **The key role of virtual prototypes for the functional safety of software-defined vehicles**
Steffen Schmidt, Managing Director, IPG Automotive GmbH

14:45 **Theoretical and practical solutions in fail operational chassis electronics**
Axel Freiwald, Application Lead Chassis & Safety,
Technical Marketing, Infineon Technologies AG

15:15 **Recent advances in level 2 and 3 ADAS systems and their impact on modern braking and steering systems**
Eleftherios Psaltis, Cost Engineer,
Maria Guitart Corominas, Cost Engineer, A2Mac1

15:45 Refreshment break with coffee and tea in the exhibition area

16:30 – 18:00, Parallel strand I – Festsaal

NEW CHASSIS AND SYSTEMS

Moderation: Dr. Christoph Elbers, Vice President
Car Chassis Technology Development, ZF Group

16:30 **Vision EQXX – innovative chassis system for a highly efficient electric vehicle**
Dr. Dirk Herkenrath, Manager Chassis Design,
Mercedes-Benz AG

17:00 **Development of steer-by-wire system requiring no changes in steering wheel hand position**
Kenji Shibata, Project Manager, Chassis Development,
Toyota Motor Corporation, Japan [in cooperation with
JTEKT, Japan; DENSO, Japan]

17:30 **Using DFSS and autonomy to aid in brake-to-steer vehicle performance characterization**
Dr. Thomas Raste, Principal Expert Vehicle Dynamics,
Continental Teves AG & Co. oHG [in cooperation with
CNXMotion, USA]

18:30 **Evening reception in Munich Ratskeller**
Enjoy interesting conversations
with colleagues and speakers in a pleasant atmosphere.

PARALLEL STRAND II

14:15 – 15:45, Parallel strand II – Palaishalle

NEW SYSTEMS AND CONCEPTS

Moderation: Klaus Baltruschat, Strategic Account Manager,
Head of Sales: Tires & Wheels, TÜV SÜD Product Service GmbH

14:15 **Mechanical-hydraulic, adaptive stabilizer bar with frequency-selective roll damping**
Dr. Serge Vos, Senior Expert Advanced Spring &
Damper Technologies, BMW AG;
Thomas Schrüllkamp, Head of R&D Chassis Systems,
Mubea Fahrwerksfedern GmbH

14:45 **Elasto-kinematic and structural design of the multi-link torsion axle and its full-vehicle evaluation**
Jens Olschewski, Research Associate, Institute of Automotive
Lightweight Design (FLB), University of Siegen

15:15 **Sustainable and innovative lightweight solutions while staying cost-competitive**
Dr. Barbara Mundt, Lead Technical Manager,
Lukas Christopher Schröder, R&D Engineer,
Outokumpu Nirosta GmbH

16:30 – 18:00, Parallel strand II – Palaishalle

SIMULATORS

Moderation: Prof. Bernhard Schick, Head of Institute for
Advanced Driver Assistance Systems and Connected Mobility (IFM),
Kempten University of Applied Sciences

16:30 **Comfort evaluation on a dynamic driving simulator with advanced tire, road, and vehicle models**
Dr. Benjamin Rieff, Real-Time Solutions Architect,
cosin scientific software AG [in cooperation with IFM,
Kempten University of Applied Sciences; AB Dynamics, UK;
rFpro, UK; MdynamiX AG; IPG Automotive GmbH]

17:00 **Subjective / objective assessment of a cable-driven simulator immersivity and realism**
Prof. Dr. Massimiliano Gobbi, Full Professor, Dept. of
Mechanical Engineering, Politecnico di Milano
[in cooperation with School of Psychology, Vita-Salute
San Raffaele University; VI-grade s.r.l.], Italy

17:30 **Gaining insight into cross-functional vehicle behavior – usage of a vehicle dynamics model in objective and subjective full vehicle simulation (HiL, SiL & DiM)**
Michael Bidlingmaier, Key Expert Digital Vehicle Dynamics
Integration, Mercedes-AMG GmbH [in cooperation with
VI-grade s.r.l., Italy; VI-grade GmbH]

chassis.tech

08:30 – 10:00, chassis.tech section – Palaishalle

AUTOMATED DRIVING – DEVELOPMENT METHODS

Moderation: Heinz Müllner, Senior Vice President Engineering Drivetrain, Cabin & Chassis, Head of Planning & Concepts, MAN Truck & Bus SE

08:30

KPI-based attribute development of lane keeping assist systems
Daniel Neidlein, Head of ADAS/AD Attributes, AUDI AG [in cooperation with MdynamiX AG; IFM, Kempten University of Applied Sciences]

09:00

A modular framework for the virtual calibration and validation of driver assistance systems
Moritz Markofsky, PhD Student, Chassis Systems, Porsche Engineering Services GmbH [in cooperation with Chair of Mechatronics, University of Duisburg-Essen]

09:30

Tool and scenario development for LCA hardware-in-the-loop test
Federico Alfatti, PhD Student, Testing and Validation Engineer, Università Degli Studi di Firenze [in cooperation with Meccanica 42 Srl], Italy

steering.tech

08:30 – 10:00, steering.tech section – Festsaal

INNOVATIVE TECHNOLOGIES

Moderation: Dr. Christoph Bittner, Director Development Chassis Systems, Dr. Ing. h.c. F. Porsche AG

08:30

The Back Ring Light Element (BRLE) – where user experience meets safety
Jonas Bott, Core Engineer, Joyson Safety Systems Aschaffenburg GmbH

09:00

Challenges and opportunities of integrating a stowable steering column with a steer-by-wire handwheel actuator
Zachery Schultz, Steering Columns Sr. Product Engineer, Keyur Patel, Engineering Software Supervisor, Nexteer Automotive Corp., USA

09:30

Decouplable steering system with the possibility of same-direction and opposite-direction wheel engagement
Fabian Weitz, Research Assistant, Institute of Vehicle System Technology (FAST), Karlsruhe Institute of Technology (KIT)

brake.tech

08:30 – 10:00, brake.tech section – Fürstensalon

NEW BRAKE CONCEPTS AND TEST METHODS

Moderation: Prof. Dr. Rüdiger Tiemann, Head of Chassis and Vehicle Dynamics, Automotive Engineering, htw saar – University of Applied Sciences

08:30

Implications of brake system concepts without wheel-individual rear-axle brakes with focus on differential gearboxes
Tobias Loss, PhD Researcher Advanced Vehicle Systems, Robert Bosch GmbH [in cooperation with Institute of Electromobility, TU Kaiserslautern]

09:00

Embedding brake corners in a vehicle environment using hardware-in-the-loop I dyno-in-the-loop
Marco Zessinger, Technical Director, Link Europe GmbH [in cooperation with Link Engineering Company, USA]

09:30

Brake feel in professional driving simulators
Diego Minen, CTO, VI-grade s.r.l. [in cooperation with Dept. of Mechanical Engineering, Politecnico di Milano], Italy

tire.wheel.tech

08:30 – 10:00, tire.wheel.tech section – Königssaal

TIRES AND THE ENVIRONMENT

Moderation: Ralf Schweizer, Head of Development Wheels, Tires, Tire Pressure Monitoring Systems, AUDI AG

08:30

Tire road wear particles (TRWP): from measurements to stakes
Frédéric Biesse, Senior Fellow for Tire Physics and Modelization, Manufacture Française des Pneumatiques Michelin, France

09:00

Tire degradation particle measurement and compound analysis
Nick Molden, Founder & CEO, Emissions Analytics Ltd, UK

09:30

New inner drum test bench for dynamic tests of PLT and truck tires
Dr. Martin Gießler, Head of Research Group Vehicle Conception, Institute of Vehicle System Technology, Karlsruhe Institute of Technology (KIT)

// 10:00

Refreshment break with coffee and tea in the exhibition area

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10:30 – 12:00, chassis.tech section – Palaishalle

AUTOMATED DRIVING – DRIVER AND SECURITY

Moderation: Dr. Christian Hartweg, Manager Vehicle Dynamic Specification & Requirements, Opel Automobile GmbH

10:30

Holistic driver perception – unaddressed challenges in autonomous driving today
Kevin Meuer, Manager Advanced Software Products, Continental Engineering Services GmbH

11:00

The key for future vehicles – development of chassis components according to cybersecurity regulations
Dr. Marcus Perner, Technical Consultant Functional Safety, IAV GmbH

11:30

Development of model predictive motion planning and control for autonomous vehicles
Jaume Cartró Benavides, Project Engineer, Vehicle Dynamics, IDIADA Automotive Technology, S.A., Spain

10:30 – 12:00, steering.tech section – Festsaal

STEER-BY-WIRE

Moderation: Dr. Matthias Schölzel, Consultant for Pre-Development Steering Systems, BMW AG

10:30

Steer-by-wire – requirements and regulations
Joseph Beer, Officially Recognised Expert, TÜV SÜD Auto Service GmbH

11:00

Basic safety guidelines for steer-by-wire for a new DIN standard

Indroduction

Dr. Matthias Schölzel, Consultant for Pre-Development Steering Systems, BMW AG

Safety goals, item definition, and fault categories

Michael Scholand, Chief Engineer Steer-by-Wire Products, ZF Automotive Germany GmbH

Controllability in the case of a first fault

Christian Kleiner, Development Engineer in the Pre-Development of Steering Systems, BMW AG; Maximilian Wesche, PhD Student Development Steering Systems, Volkswagen AG

Operating behavior after a first failure

Georg Plettner, Systems Engineer Advanced Steering, Schaeffler Technologies AG & Co. KG

10:30 – 12:00, brake.tech section – Fürstensalon

ENVIRONMENTAL ASPECTS

Moderation: Prof. Dr. Ralph Mayer, Professorship Vehicle Systems Design, TU Chemnitz

10:30

Real-driving residual drag torque of disc brakes
Philipp Huchtkötter, PhD Student, Brake Development, Dr. Ing. h.c. F. Porsche AG

11:00

Improvements in brake fluid standardization to avoid noise and wear
Dr. Michael Hilden, Chairman ISO Brake Fluid Committee TC22/SC33/WG14, Coordinator SAE & ISO Task Force “brake fluid lubrication”, Chief Expert Brake Fluid & Valves, Robert Bosch GmbH [in cooperation with BASF SE]

11:30

Next evolutions in the development of brake emission testing
Christof Danner, Project Manager Chassis, AVL List GmbH, Austria

10:30 – 12:00, tire.wheel.tech section – Königssaal

INNOVATIONS IN TIRES AND WHEELS

Moderation: Stefan Dittmar, Head of Wheels, TÜV SÜD Product Service GmbH

10:30

Innovation on wheels: how new mobility and the focus on sustainability will change wheel design
Ralf Duning, Vice President Global Engineering, Maxion Wheels EAAP Holding GmbH [in cooperation with lochpe Maxion S.A., Brazil]

11:00

Study on the relationship between wheel stiffness and driving stability
Atsushi Hirano, Assistant Chief Engineer Innovative Research Excellence Dynamics Performance, Honda R&D Co., Ltd., Japan

11:30

Wheel concepts for extending the range of BEVs and upgrading the premium wheel design
Prof. Dr. Günter Leister, CEO, tire.wheel.mobility solutions / twms consulting [in cooperation with Ulbrichts GmbH, Austria]

// 12:00

Lunch in the exhibition area

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chassis.tech

13:30 – 15:00, chassis.tech section – Palaishalle

VEHICLE DYNAMICS

Moderation: Martin Schwarz, Head of Axially Parallel Steering Gear and Rear Axle Steering, BMW Group

13:30 Study of improving comfortable turning feel by coordinated control between steering and suspension
Masayoshi Kimura, Senior Staff Engineer, Research and Development, Hitachi Astemo Langen GmbH [in cooperation with Hitachi Astemo, Ltd., Japan]

14:00 Software as a product – road surface detection
Keyur Patel, Engineering Software Supervisor, Nexteer Automotive Corp., USA

14:30 Intelligent combination of software calibration and highly responsive hydraulics control
Alexander Alonso Torres, Development Engineer Innovative Suspension Systems, KYB Europe GmbH, Spain;
Christian Macri, Product Planning and Strategy Manager, KYB Europe GmbH

steering.tech

13:30 – 15:00, steering.tech section – Festsaal

DIGITAL DEVELOPMENT

Moderation: Dirk Ferge, Senior Manager Business Development & Innovation, JTEKT Europe

13:30 Application of digital twins in EPS/SbW development
Dr. Stefan Kirschstein, Engineering Manager System and Vehicle Simulation, ZF Automotive Germany GmbH

14:00 Enhancement of subjective steering feel in driver-in-the-loop simulators
Michael Naylor, Principal Engineer, Vehicle Dynamics and Multibody Systems, HORIBA MIRA Ltd., UK

14:30 Evaluation of steering feel with different feedback actuators in driving simulators
Florian Goy, Vehicle Dynamics Engineer, Hyundai Motor Europe Technical Center GmbH [in cooperation with MdynamiX AG; Kempten University of Applied Sciences]

brake.tech

13:30 – 15:00, brake.tech section – Fürstensalon

FUTURE BRAKE SYSTEMS

Moderation: Dr. Falk Hecker, VP Technology – Driver Assistance and Automated Driving, Knorr-Bremse Systeme für Nutzfahrzeuge GmbH

13:30 Modular brake systems for future requirements
Alexander Gaedke, VP Program Management IPB, Robert Bosch GmbH

14:00 Redundant brake systems for true by-wire applications
Holger Schmidt, Senior Expert Redundant Brake Systems for Automated Driving, Continental Teves AG & Co. oHG

14:30 Virtual vehicle development approach for optimizing energy efficiency and vehicle stability of electrified vehicles using the example of brake blending
Dr. Steven Yan, Business Development Manager Powertrain, IPG Automotive GmbH

tire.wheel.tech

13:30 – 15:00, tire.wheel.tech section – Königssaal

TIRES AND VIRTUAL DEVELOPMENT

Moderation: Edwin van der Stad, Vice President Europe, Nexen Tire Europe s.r.o.

13:30 Tire performance optimization using intercoupled TRICK, thermoRIDE, and weaRIDE physical models
Prof. Dr. Flavio Farroni, Assistant Professor @ UniNa and CEO & Co-Founder @ MegaRide, Department of Industrial Engineering, University of Naples Federico II [in cooperation with MegaRide SRL], Italy

14:00 RFID in tires is the new market standard to connect tires to their ecosystems
Christophe Duc, RFID Initiative Leader for Car Manufacturers, Manufacture Française des Pneumatiques Michelin, France

14:30 Efficient tire/handling development by applying virtual vehicle and tire layout
Carsten Schröder, Head of Expert Field Vehicle Dynamics, Continental Reifen Deutschland GmbH [in cooperation with Volkswagen AG]

15:00 Refreshment break with coffee and tea in the exhibition area



chassis.tech plus

15:30 – 16:30, Plenary section – Festsaal

KEYNOTE LECTURES III

Moderation: Prof. Dr. Peter E. Pfeffer, Automotive Engineering, Hochschule München University of Applied Sciences

15:30 KEYNOTE Silence, please! – What we need to do about vehicle noise emissions now
Prof. Dr. Frank Gauterin, Spokesperson of Directors of the Institute of Vehicle System Technology (FAST) at KIT, Scientific Spokesperson KIT Mobility Systems Center, Scientific Spokesperson High-Performance Center Mobility Systems Karlsruhe, Karlsruhe Institute of Technology (KIT)

16:00 KEYNOTE Virtual assessment of motorcycle stability and comfort behavior and its influence on chassis design
Leonardo Bagnoli, Head of Vehicle Simulation Dept., Ducati Motor Holding s.p.a., Italy

16:30 Closing remarks
Prof. Dr. Peter E. Pfeffer, Automotive Engineering, Hochschule München University of Applied Sciences; Dr. Alexander Heintzel, Editor-in-Chief ATZ | MTZ Group, Springer Nature

The current program is also available online:

www.atzlive.de/en/chassis





TÜV SÜD

Generating competitive edge through smart use of knowledge.

TÜV SÜD is a premium quality, safety, and sustainability solutions provider that specializes in testing, inspection, auditing, certification, training, and knowledge services. Since 1866, the company has remained committed to its founding principle of protecting people, property, and the environment from technology-related risks.

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Registration fee

Participation on-site – limited

€ 1,595.– plus VAT

The “participation on-site” package includes the keynote lectures and all presentations of the two parallel strands on the 1st day and the four parallel sections on the 2nd day. Also included are the event documents, the accompanying trade exhibition, the use of the digital event platform as well as catering during breaks, and the evening event on 05-07-2022.

Participation virtually via live stream – unlimited

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University members of the IAVSD receive a 50 % discount on the registration fee.

Languages used in the presentations

On-site: German and English with simultaneous interpreting (German – English / English – German)

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Further Information and Online Registration:

www.atzlive.de/en/chassis



Date

5 – 6 July 2022

Venue

Hotel Bayerischer Hof or virtually via live stream
Promenadeplatz 2 – 6, 80333 Munich, Germany

Hotels

Some hotels have room blocks at reduced prices for the participants. You can find more information on the events page of our website.

Evening reception in Munich Ratskeller

Tuesday, 05-07-2022 from 18:30 in Munich Ratskeller, Marienplatz 8, 80331 Munich, Germany



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5 – 6 July 2022, Munich, Germany or virtually via live stream

Your contact person

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The organizer

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