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CONFERENCES ON VEHICLE AND POWERTRAIN DEVELOPMENT

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chassis.tech plus 2025

4 congresses in one event

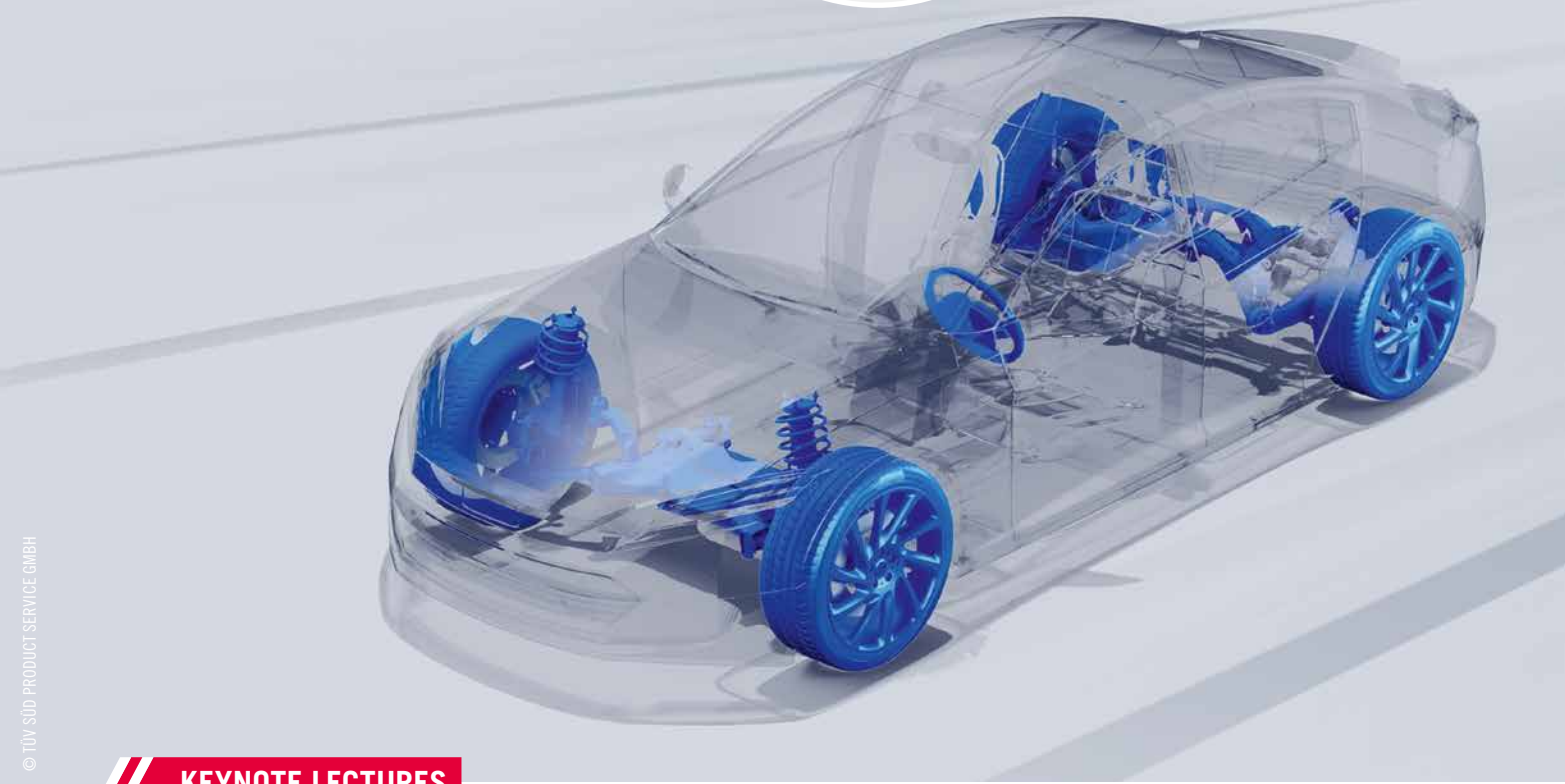
3 – 4 June 2025
Munich, Germany
or virtually via live stream

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

auto motor und sport / Automobili Lamborghini S.p.A. / BMW AG /
Bosch Vehicle Motion China / Hyundai Motor Europe Technical Center GmbH /
MdynamiX AG / NIO Performance Engineering Ltd. / ZF Active Safety GmbH

TÜV SÜD

ONE FOR ALL

4 congresses in one event

chassis.tech plus

Understanding the chassis in the context of its interactions – Harmonizing chassis development processes with those of automated driving and electric mobility

Adapting the chassis components to the vehicle – Closer linking of components, modules, and systems for high levels of integration

chassis.tech

Smart chassis systems – Using software tools, AI, digital twins, virtual testing, and road tests intelligently for optimized vehicle dynamics

steering.tech

Innovative steering systems – Creating robust and interactive solutions for steering feel, steer-by-wire, hand-over, and take-over

brake.tech

Reliable brake systems – Representing brake-by-wire, brake blending, pedal feel, and Euro 7 environmental aspects reliably in testing and simulation

tire.wheel.tech

Modern tire and wheel components – Developing methods and processes for tire/road interaction and for sustainable products

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

Welcome

Billions of people throughout the world use vehicles every day, and their safety, comfort, and driving experience all depend to a great extent on the performance of modern chassis systems. These systems must not only ensure stability, steering precision, braking performance, and interaction with the tires, they must also offer maximum comfort and must flexibly adapt to different driving situations.

State-of-the-art vehicle architectures integrate innovative steering, braking, chassis, and tire systems that optimize the driving experience by using software-based solutions and intelligent automation. Sustainability and cost-effective solutions play a decisive role in enabling broad market penetration while at the same time minimizing environmental impact.

The 16th International Munich Chassis Symposium chassis.tech plus brings together leading experts from industry and science to present and discuss the very latest developments in chassis systems, steering, brakes, and wheels/tires. The focus will be on innovative technologies that optimize the driving experience from the customer's perspective while also addressing the increasing requirements with regard to efficiency, sustainability, and automation.

You can look forward to exciting keynote lectures, 50 specialist papers, and valuable discussions with international industry leaders. We warmly welcome you to the symposium – either at the Bayerischer Hof in Munich or via our live stream – and hope you enjoy an inspiring event.

16TH INTERNATIONAL MUNICH CHASSIS SYMPOSIUM

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

Stay at the cutting edge!

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

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.

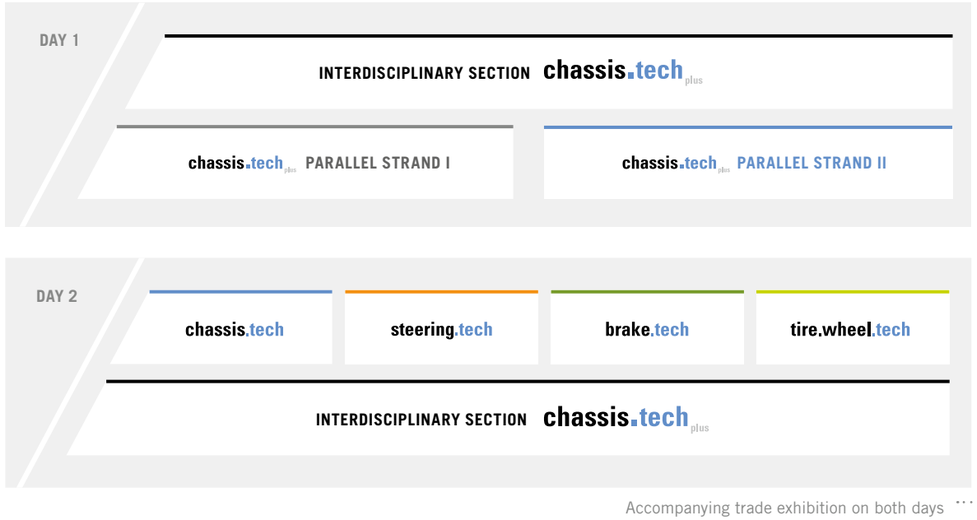
The 1st day will be taken up by the interdisciplinary section chassis.tech plus with keynote lectures and two parallel sessions of lectures in the afternoon.

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

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

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

In 2025, the main topics of the symposium include sustainability, reliability, and AI, as well as the simulation of chassis components. Other subjects include safety standards for steer-by-wire systems, simulation methods, and the evaluation of adaptive steering systems. Attention will also be paid to new electro-mechanical braking (EMB) systems and brake feel, as well as commercial vehicle and off-highway brakes. The focus will also be on tire testing and simulation, sustainability for tires and wheels, and the interaction between tires and the road.



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

chassis.tech plus 2025 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, 3 June 2025 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.

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.

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 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 experts in their respective fields, 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

Klaus Baltruschat
TÜV SÜD Product Service GmbH

Prof. Dr. Lutz Eckstein
RWTH Aachen University

Kenneth Ekström
Volvo Car Corporation, Sweden

Dr. Christoph Elbers
ZF Group

Dr. Christian Hartweg
Opel Automobile GmbH

Prof. Hideo Inoue
Kanagawa Institute of Technology, Japan

Dr. Thomas Kersten
Volkswagen do Brasil, Brazil

Thomas Kutsche
ZF Group

Heinz Müllner
MAN Truck & Bus SE

Dr. Marcus Perner
IAV GmbH

Prof. Bernhard Schick
Kempten University of Applied Sciences

Timo Schöning
Hyundai Motor Europe Technical Center GmbH

steering.tech

Dr. Christoph Bittner
Dr. Ing. h. c. F. Porsche AG

Head of steering.tech section

Stéphane Cassar
ZF Group

Jennifer Endres
Robert Bosch Automotive Steering GmbH

Frank Esser
Ford-Werke GmbH

Dr. Robert Fuchs
JTEKT Corporation, Japan

Hans Joachim Kieserling
Mercedes-Benz AG

Bertram Möller
Nexteer Automotive Germany GmbH

Prof. Dr. Manfred Plöchl
TU Vienna, Austria

Kristof Polmans
thyssenkrupp Presta AG, Liechtenstein

Dr. Matthias Schölzel
BMW Group

Dr. Yasuji Shibahata
Hitachi Astemo, Ltd., Japan

Dr. Christian Strümpler
Joyson Safety Systems Aschaffenburg GmbH

brake.tech

Alexander Gaedke
Robert Bosch GmbH

Head of brake.tech section

Moritz Bolay
Mercedes-Benz AG

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

Dr. Falk Hecker
Knorr-Bremse Commercial Vehicle Systems GmbH

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 Automotive Technologies GmbH

tire.wheel.tech

Ralf Schweizer
AUDI AG

Head of tire.wheel.tech section

Stephane Bertoldi
Michelin Reifenwerke AG & Co. KGaA

Stefan Dittmar
TÜV SÜD Product Service GmbH

Ralf Duning
Maxion Wheels Holding GmbH

Dr. Michael Frey
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, 03-06-2025 / MORNING / FESTSAAL

KEYNOTE

09:30

Dr. Mihiar Ayoubi,
Senior Vice President Development Driving Experience, BMW AG, Germany

Dynamic Performance Control in the "Neue Klasse" – exploring the digital transformation of BMW's chassis technology

KEYNOTE

11:10

(From l. to r.)
Stéphane Cassar,
Vice President Steer-by-Wire Product Group, ZF Active Safety GmbH, Germany

Danilo Teobaldi,
Principal Chief Engineer, Head of Advanced Technologies, NIO Performance Engineering Limited, UK

ZF SbW on the Nio ET9: introduction, targets, and key factors

KEYNOTE

09:55

Tyrone Johnson,
Managing Director, Hyundai Motor Europe Technical Center GmbH, Germany

30 years of innovation: how HMETC drives Hyundai's journey from mainstream to N and Genesis performance

KEYNOTE

11:35

(From l. to r.)
Jens Dralle,
Head of Test & Technology Department, auto motor und sport, Germany

Prof. Bernhard Schick,
CEO, MdynamiX AG, Germany

Auto Motor und Sport strengthens ADAS testing expertise – customer perspective and objective methods

WEDNESDAY, 04-06-2025 / AFTERNOON / FESTSAAL

KEYNOTE

15:15

Frank Ueltzhöffer,
Vice President Engineering, Bosch Vehicle Motion China, China

Speed²: vehicle motion SW in China

KEYNOTE

15:45

Victor Underberg,
Head of Whole Vehicle Development, Automobili Lamborghini S.p.A., Italy

Lamborghini Temerario: hybrid 10,000 REVolution

chassis.tech plus

08:00 **Registration at the check-in for on-site participants**

09:00 **Start of the live stream for virtual participants**

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 – 10:20, Plenary section – Festsaal

KEYNOTE LECTURES I

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

09:30 KEYNOTE
Dynamic Performance Control in the "Neue Klasse" – exploring the digital transformation of BMW's chassis technology
Dr. Mihiar Ayoubi, Senior Vice President Development Driving Experience, BMW AG, Germany

09:55 KEYNOTE
30 years of innovation: how HMETC drives Hyundai's journey from mainstream to N and Genesis performance
Tyrone Johnson, Managing Director, Hyundai Motor Europe Technical Center GmbH, Germany

10:20 Opening of the accompanying trade exhibition and refreshment break in the exhibition area

11:10 – 12:00, Plenary section – Festsaal

KEYNOTE LECTURES II

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

11:10 KEYNOTE
ZF SbW on the Nio ET9: introduction, targets, and key factors
Stéphane Cassar, Vice President Steer-by-Wire Product Group, ZF Active Safety GmbH, Germany;
Danilo Teobaldi, Principal Chief Engineer, Head of Advanced Technologies, NIO Performance Engineering Limited, UK

11:35 KEYNOTE
Auto Motor und Sport strengthens ADAS testing expertise – customer perspective and objective methods
Jens Dralle, Head of Test & Technology Department, auto motor und sport;
Prof. Bernhard Schick, CEO, MdynamiX AG [in cooperation with Institute for Driver Assistance and Connected Mobility (IFM), Kempten University of Applied Sciences], Germany

12:00 – 12:45, Plenary section – Festsaal

INTERACTIVE PANEL DISCUSSION: DO WE NEED X-BY-WIRE OR NOT?

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

12:45 Lunch in the exhibition area

PARALLEL STRAND I

14:00 – 15:30, Parallel strand I – Festsaal

ADAS AND THE SOFTWARE-DEFINED VEHICLE

Moderation: Martin Schwarz, Head of Development Steering Gear Upper Midsize Class, Luxury Class and Rear Axle Steering, BMW Group

14:00 **ATLAS-L4: project results and outlook**
Lars Joern Lippert, Project Manager Pre-development Automated Driving, MAN Truck & Bus SE, Germany

14:30 **Software solutions to unlock the potential of multi-actuator vehicle dynamics control**
Helge Westerfeld, Project Director Vehicle Motion Management, Robert Bosch GmbH, Germany

15:00 **Influence of the SDV trend on a legacy automotive application chassis**
Udo Dannebaum, Lead Principal Engineer, Chassis System Architect, Infineon Technologies AG, Germany

PARALLEL STRAND II

14:00 – 15:30, Parallel strand II – Palaishalle

TRENDS IN TIRES AND WHEELS

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

14:00 **Making wheel innovations affordable**
Ralf Duning, Vice President Global Engineering, Maxion Wheels Holding GmbH, Germany

14:30 **How Michelin digital twins can enhance vehicle safety**
Dr. Pierre Fraisse, Vice President Technical Operations Passenger Car and Light Truck Tires,
Dr. Jérémy Vayssettes, Dev. Program Leader – Algorithm-based Solutions for Connected Mobility, Manufacture Française des Pneumatiques Michelin, France

15:00 **The connected tire as an enabler of safer and more sustainable mobility: what is possible today**
Dr. Lorenzo Alleva, Director Digital Lab, Bridgestone, Italy

15:30 Refreshment break with coffee and tea in the exhibition area

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

INNOVATIVE SYSTEMS

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

16:00 **Future brake systems – overview and comparison of alternatives**
Dr. Michael Kunz, Vice President Engineering Platform Brake System and Software, Robert Bosch GmbH, Germany

16:30 **Towards zero emissions: integrating the brake system into the eDrive**
Niels Schreuders, Project Manager Future in Drive Brake,
Timo Schmidt, Manager System Specification and Testing, Future E-Drive, Mercedes-Benz AG, Germany

17:00 **A novel torque vectoring approach to enhance the driving experience**
Alessandro Pino, Vehicle Dynamics Controls Calibration Engineer,
Marco Paparone, Control System Engineer,
Bugatti Rimac d.o.o., Croatia

17:30 **High-frequency traction control with surface state estimation and optimal slip tracking**
Tomaž Kompara, Vehicle Motion Control Team Lead, Elaphe Propulsion Technologies Ltd., Slovenia

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

AI, VIRTUAL DEVELOPMENT, AND NEW FEATURES

Moderation: Dr. Thomas Kersten, Director, Chassis, ADAS, Powertrain Development, Volkswagen do Brasil

16:00 **Application of artificial intelligence in chassis development**
Prof. Dr. Marcin Hinz, Research Professor, Artificial Intelligence in Mechanical Engineering, Hochschule München University of Applied Sciences, Germany

16:30 **Camera-based vehicle pitch detection for automatic dynamic headlamp leveling**
Dr. Matthias Reiter, Software Engineer, ADAS Core Europe, Ford-Werke GmbH, Germany

17:00 **Driving simulator study on the roll center influence on the ride & handling performance of HMG vehicles**
Alessandro Salgarello, Advanced Chassis Engineer, Hyundai Motor Europe Technical Center GmbH, Germany [in cooperation with Hyundai Motor Company, South Korea]

17:30 **Fusion of real world testing and simulation – chassis optimization on a 7-poster rig for all tracks in one day**
Boris Kirchner, Managing Director, TRE GmbH [in cooperation with IPG Automotive GmbH; rFpro], Germany

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

PROGRAM // WEDNESDAY, 04-06-2025 MORNING

chassis.tech

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

CHASSIS COMPONENTS

Moderation: Thomas Kutsche, Vice President Engineering Suspension, ZF Friedrichshafen AG

08:30 **Innovative electromechanical actuator for high-performance automotive active suspensions**
Francesco Mega, Product Innovation Manager, Streparava S.p.A., Italy

09:00 **Influence of ball joint friction on driving comfort**
Kai Pfitzer, PhD Student, Development Driving Experience, BMW AG [in cooperation with Chair of Automobile Engineering, TU Dresden], Germany

09:30 **Versatility of a full plastic axial sliding bearing for a BEV suspension platform**
Robert Hamrodi, Engineering Manager, Oiles Deutschland GmbH, Germany [in cooperation with Oiles Corporation, Japan]

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

SUSTAINABILITY, RELIABILITY, AND AI

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

10:30 **Innovative and sustainable wheel bearings with reduced friction**
Andreas Becker, Expert Wheel Bearing Technology PassCar, Schaeffler Technologies AG & Co. KG, Germany

11:00 **Integrative fusion of the chassis and powertrain for enhanced safety and reliability**
Tim Ahrenhold, Functional Developer Chassis Control Systems, IAV GmbH, Germany

11:30 **Real-world implementation of artificial intelligence in integrated chassis control**
PhD Zoltan Hankovszki, Lead Engineer Chassis & Driving Functions, AVL List GmbH, Austria [in cooperation with University of Surrey, UK]

steering.tech

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

SAFETY STANDARDS OF SBW SYSTEMS

Moderation: Dr. Matthias Schölzel, Consultant Advanced Development Steering Systems, BMW AG

08:30 **Controllability of a non-redundant hand wheel actuator (HWA) in case of failure of the active feedback torque**
Introduction
Dr. Matthias Schölzel, Consultant Advanced Development Steering Systems, BMW AG, Germany
Study concept of vehicle controllability for non-redundant HWA in case of a failure of the active feedback torque
Alexander Ein Waldt, Technical Expert Steering Systems, Ford-Werke GmbH [in cooperation with Volkswagen AG], Germany
Scientific study for evaluating the controllability of a non-redundant HWA in case of failure of the feedback-torque
Julia Pelzer, Traffic Psychology and Acceptance, Institute for Automotive Engineering (ika), RWTH Aachen University [in cooperation with fka GmbH], Germany

09:30 **Simulated steer-by-brake performance in DIN 70065 maneuvers for steer-by-wire redundancy**
Sarin Kodappully, Advanced Algorithm Controls & Dynamics Engineer, Nexteer Automotive Corp., United States [in cooperation with Nexteer Automotive Germany GmbH, Germany]

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

SIMULATION METHODOLOGIES

Moderation: Frank Esser, Supervisor ADAS Core Europe, Ford-Werke GmbH

10:30 **Safety-critical validations with vehicle simulation**
Ádám Erdélyi, Vehicle Simulation Project Leader, thyssenkrupp Steering E/E Competence Center Hungary, Hungary

11:00 **Modular and remote real-time simulation applied to steer-by-wire development**
Marco Fainello, Chief Technical Officer, Danisi Engineering S.r.l. [in cooperation with Addfor S.p.A.], Italy

11:30 **Dynamic analysis of the steering system within the front axle**
Dr. Stefan Kirschstein, Engineering Manager Function & Performance Simulation Steering, ZF Active Safety GmbH, Germany

brake.tech

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

NEW BRAKE SYSTEMS

Moderation: Alexander Gaedke, VP Product Area Integrated Power Brake / Decoupled Power Brake, Robert Bosch GmbH

08:30 **The future of drive and brake – Drive-Brake Unit from DeepDrive & Continental**
Michael Ernst, Head of Technology & Competence Management, Continental Automotive Technologies GmbH [in cooperation with DeepDrive GmbH], Germany

09:00 **Innovative development of EMB: optimizing performance, robustness, and market competitiveness**
Geunsoo Choi, Team Leader of EMB Engineering Team, Hyundai Mobis Co., Ltd., South Korea [in cooperation with MOBIS Technical Center of Europe, Germany]

09:30 **Future of friction – inorganic friction on non-cast steel discs**
Dr. Roman Milczarek, CTO, LF GmbH & Co. KG [in cooperation with Professorship Vehcile System Design, University of Technology Chemnitz], Germany

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

BRAKE FEEL AND DEVELOPMENT

Moderation: Dr. Ralf Stroph, Team Leader Vehicle Dynamics Research, BMW Group

10:30 **Electric brake pedal – integration of functions and characteristics for brake-by-wire applications**
Frank Beier, Development Engineer, Development Brake Systems, Volkswagen AG, Germany

11:00 **A methodology for the objective evaluation of brake pedal feel using a brake HiL test bench**
Raphael Groß, Research Assistant, Automotive Engineering, Hochschule München University of Applied Sciences [in cooperation with MdynamiX AG], Germany

11:30 **Modeling approach for non-exhaust emissions**
Dr. Toni Feißel, Systems Engineer, IAV GmbH, Germany

tire.wheel.tech

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

TIRE TESTING AND SIMULATION

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

08:30 **Influence of the dynamic operating state on the tire relaxation length on flat track test stands**
Dr. Werner Krantz, Senior Expert Driving Dynamics, Research Institute of Automotive Engineering and Powertrain Systems Stuttgart (FKFS) [in cooperation with Institute of Automotive Engineering Stuttgart (IFS), University of Stuttgart], Germany

09:00 **RealTime measuring of road roughness and tire viscoelasticity for grip prediction and car development**
Prof. Dr. Flavio Farroni, Assistant Professor @ UniNa and CEO & Co-Founder @ MegaRide, Department of Industrial Engineering, University of Naples Federico II, Italy

09:30 **Solution space approaches to tire development for vehicle lateral dynamics**
Dr. Jungsik Kim, Vehicle Dynamics Expert, Hankook Tire & Technology Co., Ltd. [in cooperation with Hanyang University], South Korea

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

INNOVATIONS IN TIRES AND WHEELS

Moderation: Stephane Bertoldi, Sustainability Director Automotive Original Equipment, Michelin Reifenwerke AG & Co. KGaA

10:30 **Challenges and opportunities in winter tire development and testing**
Klaus Wiese, Expert Winter Tire Technology, Continental Reifen Deutschland GmbH, Germany

11:00 **Continuous estimation of dynamic wheel loads using a neuro-acoustic wheel sensor**
Ventseslav Yordanov, Scientific Researcher Driving Dynamics & Acoustics, Institute for Automotive Engineering (ika), RWTH Aachen University, Germany

11:30 **SUPA-Wheel Project: sustainable innovation in the production of aluminum wheels with CO_2 LCA**
Prof. Dr. Matthias Müller, Project Manager and Dean, Faculty of Mechanical Engineering, Fachhochschule Dortmund University of Applied Sciences and Arts, Germany

10:00 Refreshment break with coffee and tea in the exhibition area

12:00 Lunch in the exhibition area

chassis.tech

13:15 – 14:45, chassis.tech section – Palaishalle

SIMULATION

Moderation: Dr. Christian Hartweg, Head of Vehicle Dynamics, Opel Automobile GmbH

13:15 Developing and testing off-highway ADAS/AD
Dr. Hendrik Amelunxen, Product Manager, Simulation Models & Scenarios, dSPACE GmbH, Germany

13:45 Digital development enhanced by a reverse-engineered digital twin of chassis control systems
Federico Ravera, Head of Simulation, Danisi Engineering S.r.l., Italy

14:15 SPH-based virtual water wading test
Philipp Lenz, Application Expert, Advanced Simulation Technologies, AVL Deutschland GmbH, Germany

steering.tech

13:15 – 14:45, steering.tech section – Festsaal

EVALUATION OF STEERING SYSTEMS

Moderation: Roland Greul, Director Advanced Engineering, Robert Bosch Automotive Steering GmbH

13:15 Safety evaluation of steer-by-wire systems under low-friction road conditions according to DIN 70065
Taeyun Koo, Sr. System Engineer, HL Mando Corp., South Korea [in cooperation with HL Mando Corporation Europe GmbH, Germany; Hyundai Motor Company, South Korea]

13:45 Use of a combined test bench for analyzing the interactions between brakes and steering
Daniel Würsig, Manager Test Systems Actuators, IPG Automotive GmbH, Germany

14:15 Influence of adaptive steering systems on steering wheel rim shape
Katharina von Zitzewitz, HMI Specialist,
Jonas Bott, Core Engineer,
Joyson Safety Systems Aschaffenburg GmbH, Germany

brake.tech

13:15 – 14:45, brake.tech section – Fürstensalon

COMMERCIAL VEHICLE AND OFF-HIGHWAY BRAKES

Moderation: Dr. Falk Hecker, VP Technology – Driver Assistance and Automated Driving, Knorr-Bremse Commercial Vehicle Systems GmbH

13:15 Wet brakes in tractors
Dr. Ulrich Stockinger, Test Engineer Drivetrain Brake, AGCO GmbH, Germany

13:45 Electro-mechanical braking in commercial vehicles – concept and economic feasibility study
Tobias Schöfberger, Chief Product Owner E-Mobility, Knorr-Bremse Commercial Vehicle Systems GmbH, Germany

14:15 Brake system & eDrive synergies: maximized recuperation and performance using hybrid slip control
Dr. Thomas Kattenberg, Innovation Project Leader Efficiency & Electrification, ZF CV Systems Hannover GmbH, Germany

tire.wheel.tech

13:15 – 14:45, tire.wheel.tech section – Königssaal

TIRE/ROAD INTERACTIONS

Moderation: Prof. Dr. Burkhard Wies, VP R&D Tires, Continental Reifen Deutschland GmbH

13:15 Investigation of tire characteristics and conditioning in real road limit handling maneuvers
Dr. Christian Cramer, Senior Engineer Vehicle Dynamics Testing & Simulation, Continental Reifen Deutschland GmbH, Germany

13:45 A simple procedure for evaluating driving style and road topology during tire wear testing
Prof. Dr. Günter Leister, CEO, tire.wheel.mobility solutions / twms-consulting, Germany [in cooperation with MRF, India]

14:15 Evaluation method for rolling resistance coefficient on multiple conditions with CDTire
Yujiro Ito, Customer and Vehicle Performance Engineering Division, Nissan Motor Co., Ltd., Japan [in cooperation with Fraunhofer Institute for Industrial Mathematics (ITWM), Germany]

14:45 Refreshment break with coffee and tea in the exhibition area

chassis.tech plus

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

KEYNOTE LECTURES III

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

15:15 KEYNOTE
Speed²: vehicle motion SW in China
Frank Ueltzhöffer, Vice President Engineering, Bosch Vehicle Motion China, China

15:45 KEYNOTE
Lamborghini Temerario: hybrid 10,000 REVolution
Victor Underberg, Head of Whole Vehicle Development, Automobili Lamborghini S.p.A., Italy

16:15 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.com/chassis

Eventual program changes reserved

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Generating competitive edge through the 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.

Headquartered in Munich, Germany, TÜV SÜD is represented in more than 1,000 locations worldwide. TÜV SÜD operates globally with a team of more than 28,000 multi-disciplinary experts recognized as specialists in their respective fields. By combining impartial expertise with invaluable insights, the company adds tangible value to businesses, consumers and the environment.

The aim of TÜV SÜD is to support customers with a comprehensive suite of services worldwide to increase efficiency, reduce costs, and manage risk. As an innovative service provider to the automotive industry, TÜV SÜD operates a global network of testing laboratories and facilities for homologation services, tire analysis and tire testing, electrical and functional safety tests, fluid-carrying components and tanks and tank systems.

Exhibitors

The following exhibitors have already registered:

AB Dynamics
AVL List GmbH
Dassault Systèmes Deutschland GmbH
High Tech Coatings a Miba Group Company
Hitachi Astemo Europe GmbH
HOERBIGER Automotive Komfortsysteme GmbH
IAMT Engineering GmbH & Co. KG
IAV GmbH
INVENTUS Development GmbH
IPG Automotive GmbH
MdynamiX AG
Oiles Deutschland GmbH
PMG Holding GmbH
Renesas Electronics
Rollax GmbH & Co. KG
Springer Professional
Streparava S.p.A.
Vector Informatik GmbH
VI-grade GmbH

As of 11-03-2025

Registration fee

Participation on site

€ 1,745.– plus VAT

This includes the conference documentation, the accompanying trade exhibition, the use of the digital event platform, as well as the catering during breaks and the evening event on 03-06-2025.

Participation virtually via live stream

€ 995.– plus VAT

This includes the conference documentation as well as the use of the digital event platform with virtual exhibition.

Participants can change between the parallel sections at any time for both participation variants.

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)

Virtually via live stream: German and English with simultaneous interpreting (German – English)

Further Information and Online Registration:

www.atzlive.com/chassis

Date

3 – 4 June 2025

Venue

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

Hotels

Due to a trade fair taking place in Munich at the same time, hotel rooms are very limited. We strongly recommend booking early. If you have any difficulties booking accommodation, please contact Hannah Klusmann.

Book hotels in Munich via:
www.munich.travel/en/booking/accommodation/search

Evening reception in Munich Ratskeller

Tuesday, 03-06-2025 from 18:30 in Munich Ratskeller, Marienplatz 8, 80331 Munich, Germany

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We cordially invite you to our new company headquarters, Shelter16 in Benningen (near Allgäu Airport). You can expect an exciting and eventful day, practical methods as well as technologies and interesting discussions – the ideal warm-up for **chassis.tech plus**.

PROGRAM HIGHLIGHTS

- **SiL/MiL:** experience **steering feel in the early stages**
- **HiL:** test the simulation of a realistic steering & driving experience on a dynamic driving simulator
- **Road/Testing:** compare the latest technologies in driving sessions
- Experience **attribute-based live evaluation** using the example of automated parking, including **ground truth methods**
- **Photogrammetry** – learn about our simple, highly accurate & efficient measurement method for test engineers to calibrate vehicles

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MORE INFORMATION ON SCHEDULE, REGISTRATION & GTC:

www.mdynamix.de/en/chassis-xperience-drivingevent

marketing@mdynamix.de

JUNE
2

MDYNAMIX AG
Junkersstr. 4 | Shelter16
87734 Benningen

SEMINAR LEADERS

Prof. Dr. Peter E. Pfeffer
MdynamiX AG,
University of Applied Sciences Munich

Prof. Bernhard Schick
MdynamiX AG,
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CONFERENCES ON VEHICLE AND POWERTRAIN DEVELOPMENT

www.ATZlive.com

Further Information and Online Registration:

www.atzlive.com/chassis

chassis.tech plus 2025
3 – 4 June 2025, Munich, Germany or virtually via live stream

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ATZlive@springernature.com

The organizer

ATZlive // Spotlight on Powertrain and Vehicle Engineering

Our events are firm fixtures in the diaries of automotive engineers and powertrain specialists. We offer a range of innovative conferences on the latest topics in the world of automotive engineering and powertrain technology, from the perspective of research, development, and applications. Our close collaboration with the editorial teams of our specialist magazines ATZ and MTZ keeps us fully up-to-date on the latest topics and trends on the market. Springer, with its automotive technology brands in the ATZ and MTZ Group, is part of Springer Nature, one of the world's leading publishing groups for scientific, educational and specialist literature.