



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

Call for Papers
Apply online now
—
Submission of proposals
no later than
4 November 2024

Impressions of 2024



© TÜV SÜD PRODUCT SERVICE GMBH

SCIENTIFIC DIRECTOR

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



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, driving simulators, virtual testing, and road tests intelligently for optimized vehicle dynamics

/ steering.tech

Innovative steering systems –
Creating better and more compact solutions for steering feel, steer-by-wire, hand-over, and take-over

/ brake.tech

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

/ tire.wheel.tech

Modern tire-wheel components –
Developing methods and processes for Euro 7-compliant, lightweight, and sustainable products



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

Welcome

The megatrends of automated driving and electric mobility continue to be key issues in vehicle dynamics development. The technologies required are now entering the international markets – although not at the same time everywhere and not in huge leaps, but with regional differences and in small development steps. As both of these trends have a great influence explicitly on the domain of chassis systems, their systems must be prepared for change. Fulfilling the requirements of road safety is one of the most important aspects of the work of development engineers. Safe driving is reflected in vehicle stability, braking ability, redundancy, and controllability. The standards and guidelines relating to this must be complied with during the homologation process, while maintaining the highest possible level of customer satisfaction.

Development teams are also responsible for providing driving enjoyment, performance, usability, and comfort, as the implementation of product features, customer requirements, and driving experiences has the effect of promoting global vehicle sales. In addition, reliability, dynamics, cost-effectiveness, and quality remain the crucial requirements for future chassis systems.

The 16th International Munich Chassis Symposium chassis.tech plus will bring together numerous experts in wheel suspension systems, steering, brakes, and tires/wheels as well as for automated driving for an exchange of experience and constructive discussions. This is your opportunity to show us what your innovative research and development activities currently look like. On behalf of the Scientific Advisory Board, we cordially invite you to submit a paper and to contribute to the success of this globally recognized event. After the symposium, your paper will be published as part of the conference proceedings at Springer Vieweg and on the online platforms Springer Link and Springer Professional.

We look forward to talking with you.

Further details on submitting a paper can be found in this Call for Papers.

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

Klaus Baltruschat
TÜV SÜD Product Service GmbH

Dr. Alexander Heintzel
ATZ | MTZ Group

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

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 is the key worldwide meeting place for the chassis community in the fields of the chassis, steering, brakes, and tires/wheels as well as for automated driving.

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

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

Participants can move freely at any time between the four parallel sections on the 2nd day.

For the whole duration of the symposium, the accompanying trade exhibition will allow you to gather information on innovative products and services offered in the field of chassis development.

Your presentation platform

Take this opportunity to present your latest products and services to the specialist audience: as an exhibitor in our exclusive exhibition and/or as a sponsor with an attractive advertising presentation.

Registration fee

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.

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.

Venue

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

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)

For information on the various presentation options, please contact:

Mr. Alex Woidich
Phone +49 611 7878-206
alex.woidich@springernature.com



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

Friedrich Eichler
CNH Industrial Österreich GmbH,
Austria

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

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

Prof. Dr. Hans-Hermann Braess
(Honorary Chairman)

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 Strümpfer
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 SfN 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

Main topics for cars, commercial vehicles, racing cars, and motor cycles

INTERDISCIPLINARY SECTION CHASSIS.TECH PLUS

New Chassis Systems

- Chassis systems of new vehicle models
- New vehicle concepts and their chassis systems
- Demands on the chassis for lightweight design and automated driving
- Systems for electric, hybrid, and conventional vehicles
- Platform strategies and modularization
- Customer orientation, driver focus

Handling and Vehicle Dynamics

- Subjective and objective evaluation
- Customer requirements for handling and vehicle dynamics

NVH – Acoustics and Vibration in the Chassis

- Generation mechanisms
- Detection, measurement, and evaluation
- Countermeasures

Smart Chassis, ADAS, and Autonomous Driving

- More safety, comfort, and functions through connected systems
- Interaction between vehicle-to-x and the chassis
- Innovative development methods – design, simulation, simulator, validation on the test track
- Trajectory planning and redundancy

Lightweight Design

- Design solutions
- CFRP and innovative materials

Testing and Validation

- Complexity of measuring set-ups
- Sensor technology requirements
- Test planning – virtual and experimental
- Objectification of properties
- Best practice

Market Requirements

- Cost reduction and performance
- Energy efficiency and resource requirements
- Safe driving feeling, comfort/NVH

TIRE.WHEEL.TECH SECTION

Innovations in Tires and Wheels

- New tire and wheel concepts, materials, and technologies, lightweight design measures
- Simulation, measuring, and testing methods
- Traction and friction mechanisms
- Tire sensor systems and determining the friction coefficient

Tires and the Environment

- Legislation and testing regulations (Euro 7)
- Environmental protection, tire wear particles, and particulates
- Energy efficiency and CO₂ reduction
- Tire wear

CHASSIS.TECH SECTION

Chassis Systems

- Interaction between the chassis and vehicle dynamics
- Spring system and damping, air suspension
- Engine mounts
- Kinematics and elastokinematics, suspension
- Torque vectoring

Electronic Chassis Systems and Vehicle Dynamics Control

- Innovative systems
- Data fusion and system connectivity
- Semi-active and active chassis systems
- Roll stabilization
- Influence on vehicle characteristics

Virtual Chassis Development and Homologation

- Development of safety-critical systems
- Homologation
- Simulation, validation, verification
- Driving simulators
- User experience
- Agile development, artificial intelligence, testing with machine learning, big data

STEERING.TECH SECTION

Innovative Steering Systems and Steer-by-Wire

- New steering systems and functions
- Steering wheel, steering column, steering gear
- Rear axle steering
- Steer-by-wire systems and their actuator systems

Development Process, System Properties, and Architecture

- Steering feel and vehicle handling
- Human/machine interface (HMI)
- System architecture and control strategies
- Validation, functional safety, MiL/SiL/HiL tests

BRAKE.TECH SECTION

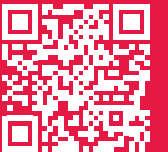
Innovative Brake Systems

- New brake systems and components
- Brake-by-wire systems
- Active principles, assemblies, materials, sensors, and actuators
- Operational and functional behavior in practice
- Brake feel, brake squeal
- New system architectures and functions
- Software and hardware components

Brakes and the Environment

- CO₂ reduction: regenerative braking, lightweight design
- Brake systems for hybrid and electric vehicles, alternative drive systems
- Friction, wear, and brake dust
- Test legislation (Euro 7), legal requirements

Further information and online submission of your proposal:



www.atzlive.de/en/chassis

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

Submission of proposals no later than

4 November 2024

Are you interested in presenting a paper on one of the topics listed at chassis.tech plus?

If so, please submit a short version of your paper via the online portal to the event page indicated. You can access this portal via the link shown in the red box above or by scanning the QR code.

Your submission proposal (please submit documents in PDF) in English should contain:

- The title of the paper
- The name of the speaker with job title, company address, telephone number and e-mail address
- The name of any co-authors with company address
- The main points and a brief summary of the paper's contents (abstract)
- Brief summary of the innovative value of the work
- Classification under one of the main subject areas

On the basis of the short version of the paper, the Scientific Advisory Boards for the conference will decide on its acceptance.

Information on the Symposium

The time allowed for presentation is 20 minutes followed by a subsequent discussion. The registration fee will be waived for one speaker per paper presented. The presentation language is either German or English. The language of the manuscripts and slides is English. After the event, your paper will be published as part of the conference proceedings at Springer Vieweg and on the online platforms Springer Link and Springer Professional.

Schedule

Deadline for submission proposals: **4 November 2024**

Notification of the authors: **February 2025**

Submission of final manuscripts: **23 April 2025**

The final conference program will be published in March 2025.

Scientific partner



www.iavsd.org

Media partners

