chassis.tech plus 2021
4 congresses in one event
29 – 30 June 2021
Munich, Germany

Call for Papers
Apply online now
Submission of proposals
no later than
30 October 2020

Impressions of 2019

Scientific Director
Prof. Dr. Peter E. Pfeffer,
Munich University of Applied Sciences

www.ATZlive.com
Welcome

It all began with such great enthusiasm. But now, it is becoming apparent that the megatrend of automated driving needs to be viewed more realistically. And this is where the chassis comes into play as an important link between the driver and vehicle occupants on the one hand and the road surface on the other. After all, without a sporty, safe, and comfortable chassis, it is not possible to sell functions and emotions. Many challenges need to be overcome – in areas such as standardized test procedures, product modularity, and development processes – if we are to achieve automated driving according to SAE levels 3 to 5. This new, realistic assessment is a good approach, as customers will otherwise be disappointed. And especially when we include the electrification of the powertrain in the equation, the development field of chassis technology is particularly challenged. The chassis is becoming increasingly complex and remains a major driving force.

The 12th International Munich Chassis Symposium chassis.tech plus will bring together numerous experts in suspension systems, steering, brakes, and wheels/tires 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
Munich University of Applied Sciences
Scientific Director of the Symposium

Stay at the cutting edge!

- Highly relevant technical papers presented by renowned speakers
- Networking in the international expert community
- Innovative products and services
In the afternoon, the parallel sections will merge with the exclusive exhibition and/or as a trade exhibition. Participants can change between the parallel sections at any time. The registration fee also includes admission to the accompanying trade exhibition.

University members of the IAV/BS receive a 50% discount on the registration fee.

Date
29 – 30 June 2021

Venue
Hotel Bayerischer Hof, Promenadeplatz 2 - 6, 80333 Munich, Germany

Languages used in the presentations
German and English with simultaneous interpreting (German – English / English – German)

For information on the various presentation options, please contact:
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PARALLEL STRAND II
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 of tomorrow
- Systems for electric, hybrid, and conventional vehicles
- Platform strategies and modularization
- Customer orientation, driver focus

Handling and Vehicle Dynamics
- Subjective and objective impressions
- 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 car-to-x and the chassis
- Innovative development methods – design, simulation, validation
- Trajectory planning and redundancy

Lightweight Design
- Design solutions
- CFRP and innovative materials

Market Requirements
- Cost reduction and performance
- Fuel consumption, efficiency, CO2
- Safe driving feeling, comfort/NVH

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
- 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 and validation
- User experience
- Agile development, artificial intelligence, big data

STEERING.TECH SECTION

Innovative Steer-by-Wire Systems
- Steer-by-wire and its actuator systems

Development Process, System Properties and Architecture
- Steering feel and vehicle handling
- Human/machine interface (HMI)
- System architecture and control strategies
- Validation, MIL/SIL/HIL tests

TIRE.WHEEL.TECH SECTION

Innovations in Tires and Wheels
- New tire and wheel concepts, materials, and technologies
- Future simulation, measuring, and testing methods
- Traction and friction mechanisms
- Tire sensor systems and determining the friction coefficient

Tires and the Environment
- Legislation and safety
- Environmental protection
- Fuel consumption, CO2 reduction
- Tire wear and particulate matter

Further information and online submission of your proposal:
www.atzlive.de/en/chassis

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 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 (please submit documents in PDF)
- 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.

The final conference program will be published in March 2021.

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: 30 October 2020
Notification of the authors: February 2021
Submission of final manuscripts: 17 May 2021
The final conference program will be published in March 2021.