

# Automated Driving 2024

Engineering Level X

19 – 20 March 2024  
Frankfurt am Main, Germany



## KEYNOTE LECTURES

Continental Autonomous Mobility Germany GmbH  
City of Frankfurt am Main // HOLON GmbH // Mobileye

# Engineering Level X

## **NEW** TECHNOLOGY STACK

ADAS/AD  
Driving functions  
Standardization

## **NEW** SYSTEM OF SYSTEMS

ODD scenarios  
Systems engineering  
Safety + security

## **PROCESSES + DEVELOPMENT METHODOLOGY**

Virtualization  
Programming models  
Tools and utilities

### **IN FOCUS**

Latest developments and architectures –  
strategies for the future



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

## Welcome

Advanced driver assistance systems (ADAS) are being continuously further developed to provide ongoing support for users. The main aims are not only to increase road safety, but also to improve the availability of the systems and to achieve their acceptance in the market.

For this purpose, areas such as sensor functions, environment modeling, situation prediction, trajectory planning, and decision-making on the one hand, and computer technology and V2X communication on the other must be optimized – supported by AI – in order to develop the necessary system-of-systems architectures.

The 9th International ATZ Conference “Automated Driving” provides a forum for development methodology, technology stacks, and security. It addresses the German government’s strategy on Automated and Connected Driving and discusses engineering and technologies for automated driving from Level 2+ upwards.

We look forward to your participation in the conference.

On behalf of the Scientific Advisory Board

## Stay at the cutting edge!

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

## Automated Driving

In order to be successful, concepts for future mobility solutions need to be developed from the perspective of user groups, urban and rural regions, and targeted business models. The focus must be on road safety and efficient performance, as well as on ecological, economic, and social aspects. In addition, automated driving functions will sustainably support users.

As an information and communication platform, the International Conference “Automated Driving” is dedicated to the key aspects of the mobility transformation.



## Scientific Advisory Board

Our Scientific Advisory Board, which is made up of prominent figures from the relevant field, provides support during the planning phase of the conference and helps to identify suitable topics.

With its expertise the board has made a valuable contribution to the choice of themes for the lecture program.



**Prof. Dr.  
Prof. h.c. Dr. h.c.  
Torsten Bertram**  
TU Dortmund University

Scientific Director of the Conference

**Jan Ackermann**  
IAV GmbH

**Andrea Conti**  
AVL List GmbH

**Dr. Thomas Dieckmann**  
ZF Group

**Nicole Donhauser**  
Elektrobit Automotive GmbH

**Dr. Robert Fuchs**  
JTEKT Corporation

**Simon Fürst**  
BMW Group

**Dr. Karl-Heinz Glander**  
NNG

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

**Dr. Andree Hohm**  
Continental Teves AG & Co. oHG

**Jörg Hölig**  
EDAG Engineering GmbH

**Helge Kiebach**  
KTI GmbH & Co. KG

**Dr. Johannes Liebl**  
Editor-in-Charge ATZ | MTZ | ATZelektronik,  
Springer Nature

**Georges Massing**  
Mercedes-Benz AG

**Jérôme Rigobert**  
Robert Bosch GmbH

**Steffen Schmidt**  
IPG Automotive GmbH

**Tino Schulze**  
dSPACE GmbH

**Walter Schwertberger**  
MAN Truck & Bus SE

**Prof. Andre Seeck**  
Federal Highway Research Institute (BAST)

**Dr. Andreas Teuner**  
ZF Active Safety GmbH

**09:15 Welcome and opening of the conference**  
Dr. Alexander Heintzel, Editor-in-Chief ATZ | MTZ Group,  
Springer Nature, Germany;  
Prof. Dr. Prof. h.c. Dr. h.c. Torsten Bertram,  
Head of the Institute of Control Theory and Systems Engineering (RST),  
TU Dortmund University, Germany

09:30 – 10:30

**KEYNOTE LECTURES I**

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

**09:30 KEYNOTE Navigating the path to mass market autonomous mobility**  
Prof. Shai Shalev-Shwartz, CTO, Mobileye, Israel

**10:00 KEYNOTE Sustainable Urban Mobility Frankfurt (SUMP): risks and opportunities of autonomous vehicles**  
Heiko Nickel, Head of Strategic Transport Planning,  
City of Frankfurt am Main, Germany

**10:30** Refreshment break with coffee and tea in the exhibition area

11:00 – 12:30

**DEVELOPMENT METHODS I**

Moderation: Andrea Conti, Vice President ADAS/AD,  
AVL List GmbH, Austria

**11:00 Application of MBSE methods in virtual homologation procedures for automated driving functions**  
Till Temmen, Project Engineer FEV.io GmbH and Research Associate, Intelligent Mobility & Software, Teaching and Research Area Mechatronics in Mobile Propulsion,  
RWTH Aachen University, Germany

**11:30 Efficient data replay for AD validation: cutting costs, enhancing speed**  
Gregor Hordys, Product Manager, Connectivity Automated Driving & Software Solutions, dSPACE GmbH, Germany

**12:00 Virtual validation of driving functions along a continuous tool chain**  
Dr. Michael Kochem, Vice President Strategic Consulting & Engineering, IPG Automotive GmbH, Germany

**12:30** Lunch in the exhibition area

14:00 – 15:30

**DRIVING FUNCTIONS I**

Moderation: Dr. Karl-Heinz Glander, Senior Vice President  
Global Engineering, NNG, Germany

**14:00 The technology of the “AutBus” autonomously driving people- and goods-mover**  
Armin Engstle, Site Manager AVL Roding,  
AVL Software and Functions GmbH, Germany

**14:30 EDAG CityBot – automated driving control of a multifunctional, autonomous robot vehicle**  
David Münzing, Portfolio Manager ADAS,  
EDAG Engineering GmbH, Germany

**15:00 The journey to regular operation of a fully automatic terminal tractor at a depot in mixed operation**  
Rüdiger Meyer, System Designer, ZF CV Systems Hannover GmbH,  
Germany

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

16:00 – 18:00

**PERCEPTION I**

Moderation: Taner Kandemir, Head of Automated Driving Software Functions,  
Mercedes-Benz AG, Germany


**16:00 Improving 3D object detection for autonomous driving – a case study of data-driven development**  
Dr. Christopher Pinke, Product Manager Robotaxi,  
Continental Autonomous Mobility Germany GmbH, Germany

**16:30 Multi-object tracking based on imaging radar 3D object detection**  
Patrick Palmer, Research Assistant, Institute RST,  
TU Dortmund University [in cooperation with ZF Group], Germany

**17:00 Enhancing digital maps with AI-derived confidence information**  
Dr. Martin Pfeifle, CTO, NNG, Germany

**17:30 System for functional hedging of automated and autonomous vehicles in the assembly line**  
Lennard Margies, Group Manager Automotive Assembly and Production of Alternative Drive Technologies, Zentrum für Mecha-  
tronik und Automatisierungstechnik gGmbH, Germany

**18:00** End of the 1st day of the conference

**19:30 Networking Dinner** 

08:30 – 10:30

DEVELOPMENT METHODS II

Moderation: Dr. Michael Kochem, Vice President Strategic Consulting & Engineering, IPG Automotive GmbH, Germany

- 08:30

**Generation, integration, and simulation of virtual ECUs in cross-domain E/E architectures**  
Martin Rühl, Senior Product Manager Software-in-the-Loop Testing, dSPACE GmbH, Germany
- 09:00

**Considering necessities for a system architecture utilizing Linux for safety**  
Jens Petersohn, Product Manager HPC Operating Systems, Elektrobit Automotive GmbH, Germany
- 09:30

**Start C-ITS in cities now – why waiting is not an option**  
Maik Bargmann, Development Engineer, IAV GmbH, Germany
- 10:00

**Assistance for complex driving maneuvers based on V2X communication**  
Dr. Thomas Otto, Group Manager Cooperative Systems, Fraunhofer Institute for Transportation and Infrastructure Systems (IVI), Germany

10:30 Refreshment break with coffee and tea in the exhibition area

11:00 – 12:30

PERZEPTION II

Moderation: Dr. Andreas Teuner, Vice President, ADAS Engineering, ZF Active Safety GmbH, Germany

- 11:00

**Statistical modelling of driving scenarios in road traffic using fleet data of production vehicles**  
Christian Reichenbächer, PhD Candidate, Mercedes-Benz AG [in cooperation with Eberhard Karls Universität Tübingen], Germany
- 11:30

**How to master the challenges of successfully using ASAM OpenSCENARIO**  
Simon Terres, Product Manager ADAS/AD, AVL List GmbH, Austria
- 12:00

**Campus FreeCity: mapping the road to smart urban mobility**  
Jochen Nüßle, Software Engineer, EDAG Engineering GmbH, Germany

12:30 Lunch in the exhibition area

13:30 – 15:30

DRIVING FUNCTIONS II

Moderation: Jan Ackermann, Senior Vice President Automated Driving & ITS TV-A, IAV GmbH, Germany

- 13:30

**Collaborative steering with the driving automation**  
Dr. Robert Fuchs, ADAS/AD Executive Professional and Head of Systems Innovation Research Department, JTEKT Corporation, Japan
- 14:00

**Cooperative lateral vehicle guidance control for automated vehicles with steer-by-wire systems**  
Robert Gonschorek, Senior Control Systems Expert – Global Steering Engineering, ZF Automotive Germany GmbH [in cooperation with TU Dortmund University], Germany
- 14:30

**Development and qualitative evaluation of new concepts to promote level-compliant driver behavior**  
Nuria Brüggemann, Research Associate, Market and Advertising Research, Traffic Psychology, Hochschule der Medien, Germany
- 15:00

**7 levels through the garage: 3D ego localization for L4 automation**  
Dr. Ralph Grewe, Product Manager Perception – Innovation Line Driverless, Continental Autonomous Mobility Germany GmbH, Germany

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

16:00 – 17:00

KEYNOTE LECTURES II

Moderation: Prof. Dr. Prof. h.c. Dr. h.c. Torsten Bertram, Head of the Institute of Control Theory and Systems Engineering (RST), TU Dortmund University, Germany

- 16:00

KEYNOTE

**From driver assistance to autonomous trucking – how fully autonomous driving systems become reality**  
Ahmed Irathni, Head of Strategy and Portfolio, Autonomous Mobility Business Area, Continental Autonomous Mobility Germany GmbH, Germany
- 16:30

KEYNOTE

**Autonomous driving as an enabler for new mobility concepts**  
Dr. Henning von Watzdorf, CEO, HOLON GmbH, Germany

17:00

**Closing remarks**  
Dr. Alexander Heintzel, Editor-in-Chief ATZ | MTZ Group, Springer Nature, Germany



### Continental Autonomous Mobility Germany GmbH

Continental develops pioneering technologies and services for sustainable and connected mobility of people and their goods. Founded in 1871, the technology company offers safe, efficient, intelligent and affordable solutions for vehicles, machines, traffic and transportation. In 2023, Continental generated preliminary sales of €41.4 billion and currently employs around 200,000 people in 56 countries and markets.

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Cooperation partner



[www.continental-automotive.com](http://www.continental-automotive.com)

Media partners





**Registration fee**

€ 1,495.– plus VAT

This includes the conference documentation, the catering during breaks and the evening event on 19-03-2024.

**Date**

19 – 20 March 2024

**Venue**

House of Logistics and Mobility (HOLM)  
Bessie-Coleman-Straße 7  
60549 Frankfurt am Main, Germany

**Languages used in the presentations**

German and English with simultaneous interpreting  
(German – English / English – German)

**Hotels**

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

**Further Information  
and Online Registration:**

[www.atzlive.de/en/audri](http://www.atzlive.de/en/audri)

**Participants**

A conference for decision-makers and experts who

- shape and develop automated driving
- are involved in the cross-cutting topic of V2X
- develop software, algorithms, DevOps, and tools
- are involved in the development of new vehicle and interior concepts

at car and commercial vehicle manufacturers, suppliers, and engineering service providers as well as in research and education and at consulting companies and organizations.

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and Online Registration:**

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19 – 20 March 2024, Frankfurt am Main, Germany

**Your contact partner**

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**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.

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