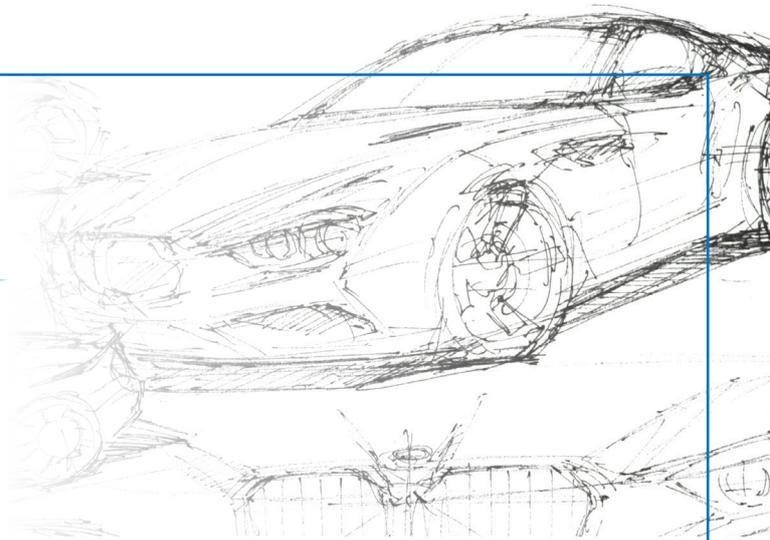
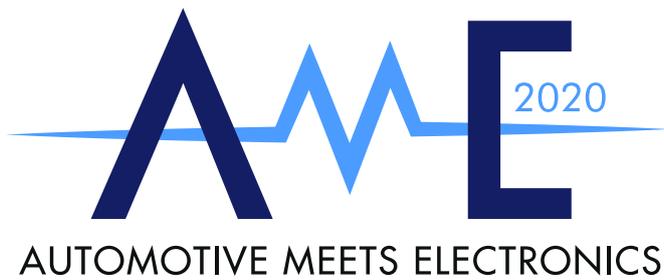


# Call for Papers



## 11. GMM Symposium

# AmE 2020

## AUTOMOTIVE MEETS ELECTRONICS

Dortmund, Westfalenhalle • March 10–11, 2020 • [www.ame-konferenz.de](http://www.ame-konferenz.de)

### Foreword

The world of Automotive and Electronics has been changing continuously. Technologies that have been discussed as projects for the future are now available in every new car, and progress toward autonomous driving is visible, although the future will still bring many challenges to master. The **AmE** is the perfect place to discuss these challenges, both from the technical as well as the legal and societal side.

Sensors become more and more powerful which allows to get a better image of the car surroundings. Increasing computational power helps to fuse data from different sources such as RADAR, LIDAR, camera and ultrasound, enhanced and combined with information from Car-2-X communication and off-board services.

Nevertheless, there are plenty of unresolved issues. On the hardware side, high computational power requires efficient chips, implemented in state-of-the-art technology, which is right now 7nm. New assembly technologies for vertically stacked dies as they are used in high-end GPUs, lead to very compact devices with a high power density. This implies forced cooling, a new concept with few experiences, in particular with respect to long term reliability.

On the software side, the construction of the car surroundings is still far away from being perfect. Whereas scenarios such as driving on a motorway are well understood, it is right now unimaginable to drive a car autonomously through a crowded downtown with thousands of bikes and pedestrians, all with a certain ignorance of the traffic rules.

**AmE** addresses industry as well as academia to improve the communication between the two mentioned worlds, triggering new ideas. **AmE** is also an excellent platform for presenting research work and getting immediate feedback from application engineering. This interaction is one of the main strengths of the **AmE** and a real magnet for all participants.

**Automotive meets Electronics – and we would like to meet you!**

Michael Wahl  
Chairman, Universität Siegen

**VDE**



GMM

## Topics

### Automated car

- Vehicle environment: acquisition methods, modelling, maps, and localization
- Driver assistance and collision avoidance
- Partially and fully automated driving
- Cooperative driving, car-2-X communication, security and privacy
- New challenges in HMI: displays, haptics, and more
- Reliability and functional safety

### Connected car

- Car-2-X communication, security, and privacy
- Backend and cloud services, apps, ad-hoc networks
- Data and communication, security, and privacy
- Advanced networking, 5G

### Electrified car

- Power distribution and control
- Electrical drive concepts
- Communication networks and security
- Sensors, data fusion, and system integration

### Development technology

- Virtual product development
- Model-based development and simulation
- Development tools and development process

This list of topics should be seen as a suggestion. We are always open to new topic addressing the domain of the AmE.

## Important dates

28.09.2019	Deadline for submission of abstracts
26.10.2019	Notification of authors
12.01.2020	Final version
10.-11.3.2020	AmE in Dortmund

## Submission

You can submit either a summary of at least 800 words or a full paper. Shorter submissions will not be considered. The length of the final version should not exceed six pages. Contributions can be submitted in English or German language. English contributions will be made available via IEEE Xplore. You can find further information on our web site.

[www.ame-konferenz.de](http://www.ame-konferenz.de)

Contributions for presentations and posters will be treated equally in the proceedings which will be published as a GMM-Fachbericht by VDE Verlag.

## Best Paper Award

As every year, we will reward the best contribution (submission and presentation).

## Contact

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