#### Scientific Directors

Prof. Dr. Thomas Brandmeier Prof. Dr. Michael Botsch

#### Research Areas

- Passive Safety
- Integrated Safety
- Testing Methods
- Safe Electromobility

## Scientific Advisory Board

- Dierk Arp Messring GmbH, Managing Director
- Prof. Dr. Ulrich Jumar
   ifak Institute for Automation and Communication
   Magdeburg e. V., Chairman and Head of Institute
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   AUDI AG, Head of Technical Development-Total Vehicle
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  Head of Automotive Engineering
- Dr. Peter F. Tropschuh
   AUDI AG, Head of Corporate Responsibility and Scientific Cooperations
- Prof. Dr. Wolfgang Utschick
  Technical University of Munich,
  Professorship Signal Processing Methods,
  Dean of the Department of Electrical Engineering

### Information and Contact



There is a limited number of parking spaces at Technische Hochschule Ingolstadt. Further parking facilities are available at the underground car park "Am Schloss" or "Congressgarage".

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# **CARISSMA**

Center of Automotive Research on Integrated Safety Systems and Measurement Area



#### **Overview**

The research and test center CARISSMA (Center of Automotive Research on Integrated Safety Systems and Measurement Area) provides a number of state-of-the-art test facilities at Technische Hochschule Ingolstadt (THI).

The intention of the interdisciplinary research is to develop CARISSMA into a leading scientific center for vehicle safety. CARISSMA cooperates with the automotive industry, scientists and research facilities all over the world.

Details under www.carissma.eu



Driving test at the Outdoor Testing Facility

### Facts and Figures

- Floor space main building: approx. 4.000 m<sup>2</sup>
- Floor space Outdoor Testing Facility: approx. 12.000 m<sup>2</sup>
- Floor space Indoor Testing Facility: approx. 1.800 m<sup>2</sup> (100 m x 18 m)

#### Research

The focus is on the joint implementation of an innovative Global Safety System, which will use integral and cooperative safety functions to increase traffic safety significantly. For this purpose, testing methods and procedures are being researched to transfer this system into application.

In CARISSMA, professors from the faculties of electrical engineering and computer science, mechanical engineering as well as the THI Business School conduct interdisciplinary research into groundbreaking innovations. The scientific and technical staff members are engaged in both public and industrial projects. Together with partner universities around the world, doctoral students are working on their theses on vehicle safety issues.

### Research Activities

- Integrated and Passive Safety
- Active Safety and ADAS
- Environment Sensors
- Vehicle2X-Communication
- Safe Electromobility
- Safety of Autonomous Systems
- Testing Methods for Safety-Critical Systems
- Simulation
- Safe Lightweight Construction (e.g. CFRP)

### Testing Facilities



View of the Indoor Testing Facility

#### CARISSMA includes the following testing facilities:

- Indoor Testing Facility
- Indoor Crash Facility
- Outdoor Testing Facility
- Drop Tower
- HiL-Lab
- Mobile Robots
- Safe Energy Storage Lab
- Vehicle2X-Lab
- Simulation Cluster
- Hexapod (Driving Simulator)