

Duration: 08:30 - 12:30

Room: Shanghai

WF-07

Future Automotive Radar Systems

Organisers:

Jürgen Dickmann, Daimler AG, Germany

Jürgen Hasch, Robert Bosch GmbH, Germany

Abstract

Highly automated driving has already arrived. However, widespread adaption of fully-autonomous driving is still facing challenges.

This workshop will discuss the introduction of highly automated and autonomous driving from various perspectives, with the focus on radar sensors as important part of the environment perception. It will discuss the advantages and challenges of Radar, especially within a typical Video, Lidar, Radar, and Ultrasonic sensor set.

Questions discussed will be:

- What are the requirements for future automotive Radars?
- Will Radar sensors still be required in the future or replaced by other technologies?
- What are the key advantages of radar sensors for autonomous driving?
- What are some of the upcoming innovations to address existing limitations?

The goal is to arrive at an understanding of what actually needs to be done to keep Radar technology in the main-stream, and provide a look into the future of automotive radar sensor concepts.

Programme

08:30 - 08:55 Automotive Radar Dilemmas

Igal Bilik, GM, USA

08:55 - 09:20 Radar Sensors Today and Tomorrow

Ingo Weber, BMW, Germany

09:20 - 09:45 Radar for Autonomous Driving – Nice or Necessary?

Fredrik Sandblom, Volvo, Sweden

09:45 - 10:10 Radars as a Complementary Sensor for Autonomous Driving

Dan McCloskey, Waymo, USA

10:10 - 10:50 Break

10:50 - 11:15 Towards Fully Automated Driving

Elena Pancera, Robert Bosch GmbH, Germany

11:15 - 11:40 Radar as Key Sensor for Level 5 Automated Driving

Thomas Fechner, Continental, Germany

11:40 - 12:05 Large Scale MIMO Systems for Automotive Radar

Ali Murtaza, Uhnder, USA

12:05 - 12:30 SAR in Automotive Radar

Andreas Stelzer, JKU Linz, Austria