



# Workshop Automotive Radar Technology



**November 21, 2019; 9.30 am**

Speaker:

Dr. Florian Pfeiffer, CEO and founder of  **perisens**

## Workshop Content:

### • Radar Technology

- Brief history of radar (from the invention in 1904 to the automotive radar sensor)
- Basics radar technology (electromagnetic wave properties and propagation effects)
- Methods of distance measurements in automotive radar sensors (pulse, FMCW, chirp sequence FMCW)
- Methods of velocity measurements in automotive radar sensors (doppler)
- Methods of Direction of Arrival (DoA) measurements in automotive radar sensors (amplitude and phased based methods, digital beamforming, concept of virtual (MiMo) and sparse array configuration)
- Radar signal processing (from raw data to object data)
- Radar vs. other sensor technologies (camera, ultra-sonic and LIDAR)
- Future trends in automotive radar

### • Integration of the radar into the vehicle

- Influences of the integration (radome) on the radar performance
- Relevant material properties (plastic and paint) and measurement principles
- Design principles of radar covers (radomes)
- Radome test solutions

## Conditions:

### Services:

- One-day workshop including 77 GHz radar life demonstration (approx. 6 hours + subsequent discussion)
- Training documents for all participants
- Participant certificates
- incl. catering
- Language: German

### Location:



TACTRON ELEKTRONIK  
Lochamer Schlag 5  
82166 Graefelfing

### Registration fees:

600 EUR + 19% VAT

### Registration under:

[mathias.otto@tactron.de](mailto:mathias.otto@tactron.de)



TACTRON ELEKTRONIK GmbH & Co.KG  
Lochamer Schlag 5 • D-82166 Graefelfing  
Tel. +49 (0)89 89 55 69 - 0 • Fax +49 (0)89 89 55 69 - 29  
[info@tactron.de](mailto:info@tactron.de) • [www.tactron.de](http://www.tactron.de)

