



# Program

<b>Monday</b>	<b>Pre-Workshop Day (optional for introduction or refreshing)</b>
<b>13:00</b>	<b>Welcome &amp; Reception Snack</b>
<b>14:00</b>	<b>Crash-Course in fundamental concepts of ISO 26262</b> Learning objectives: To understand the ... <ul style="list-style-type: none"> <li>• Content structure of the standard</li> <li>• Concepts of Item Definition, Hazard &amp; Risk Analysis, ASIL, Safety Goal</li> <li>• Safe State, Fault Tolerant Time Interval, Freedom of Interference</li> <li>• V-Model as a guide for state-of-the-art Software Development</li> <li>• Character of the standard as an engineering guideline, not a recipe</li> </ul> <i>Trainer: Stephen Norton, Quint Safety GmbH, Managing Director</i>
<b>19:00</b>	<b>End of Pre-Workshop Day</b>
<b>Tuesday</b>	<b>Day 1</b>
	<i>Moderator: Dr. Rolf Jung, University of Applied Sciences Kempten, Professor for Functional Safety, formerly STW Sensortechnik</i>
<b>08:30</b>	<b>Registration &amp; Reception Snack</b>
<b>09:00</b>	<b>Opening</b> <i>Wolfgang Mickisch, FSC.automotive Functional Safety Consulting, formerly TÜV NORD Mobility, IFM, Head of Electronics &amp; Car-IT</i>
<b>09:30</b>	<b>Workshop: Item Definition for an Intersection Pilot</b> Learning objectives: To understand and be able to define ... <ul style="list-style-type: none"> <li>• vehicle-level use cases and</li> <li>• activity diagrams</li> <li>• vehicle-level system boundaries and context</li> </ul> <i>Stephen Norton, Quint Safety GmbH, Managing Director</i>
<b>11:00</b>	<b>Coffee Break</b>
<b>11:15</b>	<b>Workshop: System Design I</b> Learning objectives: To be able to ... <ul style="list-style-type: none"> <li>• define Safety Goals</li> <li>• derive Top-Level Requirements</li> </ul> <i>Stephen Norton</i>



**Tuesday** | **Day 1 - continued**

**12:15**    **Lunch Break**

**13:00**    **Presentation and Talk: System Design II**



ASIL Decomposition and Functional Architecture, deriving system level requirements, taking into account predictability of performance.

*Dr. Bernhard Bauer, ESG*

**14:00**    **Coffee Break**

**14:15**    **Workshop: System Design II**

Learning objectives: To be able to derive and design ...

- ... ASIL Decomposition and Functional Architecture
- ... System level requirements
- ... Predictability of performance requirements

*Stephen Norton*

**15:45**    **Coffee Break**

**16:00**    **Workshop: System-Element Design**

Learning objectives: To be able to ...

- ... assign system-level requirements correctly to the elements.
- ... derive requirements for the elements.

*Stephen Norton*

**17:30**    **Evening Break / Private Consulting Workshops (optional)**

Throughout the 4 days, participants have the chance to get consulted privately and confidentially for up to 60 minutes by experienced and renowned experts...

- how to apply the skills acquired during the conference in his own work.
- how to approach and possibly resolve project specific challenges.
- Companies/participants are invited to prepare in advance issues to be dealt with during this session. Prepared NDAs may be exchanged before.

NOTE: Registration required (see registration process), but no additional fees!

---

**19:00**    **Dinner Downtown**



## Wednesday Day 2



*Moderator: Wolfgang Mickisch, FSC.automotive, formerly TÜV NORD Mobility, IFM, Head of Electronics & IT*

**08:30 Workshop: FMEA for System Element**

Learning objectives: To be able to ...

- ... assign failure modes in the FMEA.
- ... create a failure net in the FMEA.

*Stephen Norton*

**10:00 Coffee Break**

**10:15 Workshop: FMEA for System Element, Technical Safety Requirements**

Learning objectives: To be able to ...

- ... define technical safety requirements

*Stephen Norton*

**12:15 Lunch Break**

**13:00 Presentation + Workshop: State-of-the-Art Dependent Failure Analysis (DFA)**

Learning objectives: To get an understanding of ...

- ... the fundamental challenges posed by DFA of Automotive Systems.
- ... the new DeFeAt methodology developed to meet those challenges.
- ... how to work with DeFeAT in order to cover various aspects of dependent failures on system-, HW and SW level, including the aspects of freedom of interference.



*Dr. Tomislav Lovric, ZF-TRW, Functional Safety Chief Assessor*

**14:15 Coffee Break**

**14:30 Guided Talk: Handling SOTIF and Measuring Predictability of Performance**

Learning objectives: To get a deeper knowledge of ...

- ... content and context of SOTIF,
- ... the significance of the Predictability of Performance,
- ... why and how to measure the Predictability of Performance,
- ... a tool for this task.



*Dr. Wilhard von Wendorff (IABG) & Dr. Bernhard Bauer (ESG)*

**16:00 Coffee Break**

**FUNCTIONAL SAFETY MEETS ADAS**

VÖHLINSCHLOSS  
NEAR ULM  
DEC 05 - 08, 2017  
FEB 20 - 23, 2018  
JUN 12 - 15, 2018

LECTURES & TRAINING  
IN ISO 26262  
COMPLIANT  
ENGINEERING

## Wednesday Day 2 - continued

### 16:15 Panel Discussion:

***SOTIF & Predictability of Performance – crucial, but never fully attainable precondition for safe ADAS and Automated Driving?***

*with a representative of an OEM (requested), a Tier-1 (Dr. Tomislav Lovric), a Semiconductor Specialist (Dr. Wilhard von Wendorff), a Functional Safety and ADAS Expert (Dr. Bernhard Bauer).*

*Moderator: Prof. Stefan Schneider (HS Kempten, Driver-Assistance-Systems)*

### 17:30 Evening Break / Private Consulting Workshops (optional)

### 19:00 Social Get-Together and Dinner



#### Dinner Keynote:

***The Road to Autonomous Driving – Its History and Future Challenges***

*Dr. Stefan Schneider, University of Applied Sciences Kempten,  
Professor for Driver Assistance Systems, formerly BMW*



**Thursday Day 3**

*Moderator: Wolfgang Mickisch, FSC.automotive - Functional Safety Consulting*

**08:30 Presentation and Guided Talk: *Testing Complex and Safety-Critical Systems - Typical Pitfalls and Best Practices***



Pitfalls and common mistakes collected from several years of cross-sector (Automotive, Aerospace, Defence) system and software validation and verification. ISO 26262 compliant solutions presented and discussed.



*Andreas Engstler, CEO, Konzept Informationssysteme AG*  
*Armin Bolz, Automotive Branch Manager, Konzept Informationssysteme GmbH*

**10:30 Coffee Break**

**10:45 Workshop: *How to implement SAFETY Measures on System-Element Level***

Learning objectives: To get a deeper knowledge of ...

- ... content and context of SOTIF,
- ... the significance of the Predictability of Performance

*Stephen Norton*

**12:15 Lunch Break**

**13:00 Presentation & Workshop: *State-of-the-Art Failure Mode Analysis (FTA)***

Learning objectives: To be able to ...



- ... adapt the FTA scope and level of details to project needs.
- ... prepare the FTA appropriately to increase efficiency.
- ... set up a well-structured analysis process.

**12:30** *Dr. Frank Edler, elbon.de; Functional Safety Expert and book author*

**14:45 Coffee Break**

**FUNCTIONAL SAFETY MEETS ADAS**

VÖHLINSCHLOSS  
NEAR ULM  
DEC 05 – 08, 2017  
FEB 20 – 23, 2018  
JUN 12 – 15, 2018

LECTURES & TRAINING  
IN ISO 26262  
COMPLIANT  
ENGINEERING

**Thursday Day 3 - continued**

**15:00 Presentation & Workshop: *How to implement SECURITY Measures on System-Element Level***



Learning objective: To become versed in  
 ... defining safe-state and secure-state, FTTL, warning concepts etc.  
 ... selecting appropriate security measures.  
 ... complete the technical safety and security concept.

*Dr. Hasan Akram, Matrickz GmbH, CEO,  
 Mario Hoffmann, Continental, Head of Security & Privacy Consulting  
 Stephen Norton, Quint Safety*

**17:30 Evening Break / Private Consulting Workshops**



**Friday Day 4**

Moderator: Prof. Dr. Rolf Jung, University of Applied Sciences Kempten

**08:30 Master Course: *Benefits and Challenges for manufacturers and users of Semiconductor Solutions for ADAS functions***

Learning objectives: To get an understanding of ...

- ... the paradigm change for automotive semiconductor manufacturers fuelled by the efforts to implement ADAS and autonomous driving solutions in hardware.
- ... the challenges for semiconductor manufactures in developing automotive solutions in locations (exposed to sun and high temperature deltas, humidity, EMI).
- ... the need for and challenges in developing new safety architectures

*Dr. Wilhard von Wendorff, Functional Safety Expert and Semiconductor Specialist, IABG*

**10:45 Coffee Break**

**11:00 Presentation: *The Functional Safety Path to enable Multi-Core Processors for Intersection Pilot Applications***

Learning objectives: To get an understanding of ...

- semiconductor solutions for ADAS functions, their concepts, challenges.



*Thorsten Lorenzen, Texas Instruments*

**12:30 Lunch**

**13:15 Summing up Workshop: *Presentation and evaluation of the result of the exercises of working groups, presentation of Exemplary Solutions for participants to take back.***

*Stephen Norton*

**14:45 Summing up: *Quo Vadis Functional Safety for ADAS?***

*Prof. Rolf Jung, UAS Kempten, Chair for Functional Safety*

**15:00 End of Conference**