

Fraunhofer Institute for Reliability and Microintegration IZM

Contact

Paul Schuster Tel. +49 30 46403-7964 paul.schuster@izm.fraunhofer.de

Seminar Location:

Fraunhofer Institute for Reliability and Microelectronics IZM Gustav-Meyer-Allee 25 13355 Berlin, Germany

Reliability of Electronic Systems

November 21st-22nd, 2024



Thursday, November 21st

10:00 Welcome & Ir	troduction Round
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- 11:00 Session 1: Reliability Management Basics
 1.1 Terms and Definitions
 1.2 Methods of Reliability Assessment and Assurance
 Lecturers: Olaf Wittler, Johannes Jaeschke
- 12:15 Lunch Break

13:15 Session 2: Requirements & Test Development 2.1 Derivation of Application-specific Load Profiles: Mission Profiles 2.2: Basic Considerations for Reliability Test Development Lecturer: Daniel Hahn

- 15:35 Hands-on Workshop
- 16:15 Wrap-up and Discussion
- 16:45 Adjourn
- 19:00 Social Event (Dinner)

Friday, November 22nd

- **09:00** Recap
- **09:15** Session 3: Analytics & FEM as a Tool for Reliability 3.1: Structural Analysis and Material Characterization: Analytics in Reliability Prediction
 - 3.2: Selection of Materials for Reliable Design
 - 3.3: FEM as a Tool for Reliability Improvement I
 - 3.4: FEM as a Tool for Reliability Improvement II
 - 3.5: Failure Mechanism Corrosion

Lecturers: Saskia Huber, Anne Groth, Janine Conrad, Marius van Dijk, Simon Kuttler, Elisabeth Kolbinger

12:00 Lunch Break

13:30 Session 4: Condition Monitoring as Part for a Circular Economy

4.1: Condition Monitoring4.2: Introduction to Circular EconomyLecturers: Frederic Sehr, Mariam Elsotohy, Max Marwede

- 14:45 Lab Tours
- 16:15 Wrap-up & Discussion
- 17:00 End of Seminar