Ensuring functional safety: from manufacturing test to in-the-field system integration

With increasing presence of electronic devices in safety critical applications, functional safety is threatened by latent defects and degradation of the nanometer structures. In order to prevent fatal consequences in life-critical domains such as the automotive or the avionic, the correct functioning of the system must be guaranteed at all times. To this end, techniques have been developed to detect and diagnose defects. Equally important in this context are, however, degradation prediction and monitoring or the minimization of early life failures.

This seminar approaches functional safety in all steps of the development and lifetime, and covers some of the most important challenges:

- Faster-than-at-speed test
- Aging monitoring and prediction
- Fault-tolerance and dependability

Prior registration via ILIAS is required.

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