

Seminar on IHP Microelectronics

Seminar by Prof. Dr.-Ing. G. Kahmen, director of IHP (Leibniz institute in Frankfurt/Oder)
Thursday, May 15th, 09:30 – 11:00 a.m., Lichttechnikhörsaal in the LTI Building, 30.34

- Overview of the IHP (positioning, orientation, research priorities, some figures, research priorities, forms of cooperation with universities and other institutions, etc.)
- Technology and SiGe / EPIC ... Roadmap
- Activities in the field of heterointegration (status, goals, motivation)
- Overview and examples of activities in the field of circuit design
- Overview and some technical information on other research priorities at the IHP
 - Neuromorphic Computing
 - Si Photonics
 - Fault-tolerant Systems / Radiation-hardened Systems
 - Activities on layers of spin-based qubits
- Overview of open source activities
- Participation and goals in the EU Chips Act pilot line of APEC



Gerhard Kahmen received his Diploma (Dipl.-Ing.) in Electrical Engineering (Diplom) at the technical university of Aachen (RWTH) in 1997 and the Dr.-Ing. degree in electrical engineering from Ulm University in 2016. From 1998 to 2000 he worked for Philips Semiconductors in Nimegen / The Netherlands on Power Amplifier Modules for handsets. In 2001 he joined the Test & Measurement division of Rohde & Schwarz in Munich where he developed high dynamic range broadband mixed signal ASICs for test & measurement equipment. From 2006 to 2010 he was responsible for a mixed-signal ASIC R&D team as a director of engineering. From 2011 to 2019 Gerhard Kahmen was responsible for the worldwide mixed signal ASIC R&D activities of Rohde & Schwarz in a Vice President position. Since 2020 he is in the position of the scientific director at the IHP -Leibniz Institute for High Performance Microelectronics / Frankfurt (Oder) and holds a full professorship for semiconductor technology at Brandenburg Technical University (BTU). His research interests are broadband RF / Mixed-Signal ASICs with high dynamic range, ultra-high-speed digital-to-analog / analog-to-digital converters for digital RF signal generation and analysis, Si-photonic and technologies for heterogeneous integration of complex RF/mixed signal systems.