

Day 1 – Monday, July 2 nd		Day 2 – Tuesday, July 3 rd		Afternoon Sessions	
10.00 – 11.00	Welcome Coffee at SportSchloss Velen	Keynote		Session 3: Terahertz Systems <i>Chair: Klaus Solbach</i>	
11.00 – 11.15	Thomas Kaiser <i>Welcome Speech</i>	9.00 – 10.00	Andreas F. Molisch Measurement and Modelling of Terahertz Propagation Channels <i>Chair: Thomas Kaiser</i>	13.30 – 14.00	A portable THz imaging system for art conservation A. Doria; G. P. Gallerano; E. Giovenale; M. Greco; M. Picollo
Keynote		Morning Sessions		14.00 – 14.30	
11.15 – 12.15	Thomas W. Crowe Stretching Electronic Technology through the Terahertz Frequency Band <i>Chair: Thomas Kaiser</i>	10.00 – 10.20	Coffee Break	14.00 – 14.30	A Massive MIMO Signal Processing Architecture for GHz to THz Frequencies A. Batra; M. Wiemeler; T. Kreul; D. Goehringer; T. Kaiser
12.15 – 13.30	Lunch Break	Session 2: Terahertz Channel Modelling and Measurement <i>Chair: Andreas Czylik</i>		14.30 – 15.00	System-Theoretical Modeling and Analysis of Phase Control in a Photonically Steered Terahertz Phased Array Transmitter K. Kolpatzek; X. Liu; L. Haering; A. Czylik
Afternoon Sessions		10.20 – 10.50	Super-Resolution FMCW Radar System at 60 GHz for 3D Measurements D. Damyanov; T. Schultze; I. Willms	15.00 – 15.30	Experimental Validation of a Phase Control Concept for Photonically Steered Terahertz Phased Array Transmitters at Microwave Frequencies X. Liu; K. Kolpatzek; L. Haering; A. Czylik
	Session 1: Terahertz Electronics <i>Chair: Nils Weimann</i>	10.50 – 11.20	Photonic Crystal THz High-Q Resonator for Chipless Wireless Identification A. Jiménez-Sáez; M. Schüßler; C. Krause; F. Meyer; G. vom Bögel; R. Jakoby	15.30 – 16.00	Distance and Tag Aware Localization in Indoor Terahertz Systems M. El-Absi; A. Abbas; A. Abuelhajja; K. Solbach; T. Kaiser
13.30 – 14.00	THz Circuits in CMOS: Dream or Nightmare? K. Guo; W. Steyaert; A. Standaert; D. Simic; P. Reynaert	11.20 – 11.50	A Novel Ray-Tracing Algorithm for Non-specular Diffuse Scattered Rays at Terahertz Frequencies F. Sheikh; D. Lessy; T. Kaiser	16.00	Canoe Tour bus pick-up at 16.20 at the bus stop beside the church
14.00 – 14.30	Study of 130 nm SiGe HBT Periphery in the Design of 160 GHz Power Amplifier A. Ali; E. Cipriani; T. K. Johansen; P. Colantonio	11.50 – 12.20	A Comparison Study of Non-specular Diffuse Scattering Models at Terahertz Frequencies F. Sheikh; D. Lessy; M. Alissa; T. Kaiser	20.00	Dinner
14.30 – 15.00	Millimeter-wave Signal Generation and Detection via the same Triple Barrier RTD and on-chip Antenna K. Arzi; A. Rennings; D. Erni; N. Weimann; W. Prost; S. Suzuki; M. Asada	12.20 – 13.30	Lunch Break		
Keynote					
15.00 – 16.00	Safumi Suzuki Resonant Tunneling Diode Terahertz Oscillators <i>Chair: Werner Prost</i>				
16.00	FIFA World Cup 				
19.30	Dinner				



Day 3 – Wednesday, July 4th

Morning Sessions

Session 4: Terahertz Photonics

Chair: *Andreas Stöhr*

- 8.30 – 9.00 **ErAs enhanced active photonic THz components**
M. Mendez Aller; U. Nandi; H. Lu; J.C. Norman; A.C. Gossard, S. Preu
- 9.00 – 9.30 **Compact Optoelectronic THz Frequency Domain Spectroscopy System for Refractive Index Determination based on Fabry-Perot Effect**
S. Dülme; N. Schriniski; B. Khani; P. Lu; V. Rymanov; A. Stöhr; C. Brenner; M. R. Hofmann
- 9.30 – 10.00 **High Speed Single Point THz Phase Measurement Based on Dual Channel Lock-In Technique**
A. Gerling; M. R. Hofmann; C. Brenner
- 10.00 – 10.30 **Terahertz Time-Domain Spectroscopy by Asynchronous Sampling with Modelocked Semiconductor Lasers**
N. Surkamp; B. Doepke; Y. Hu; C. Brenner; M. R. Hofmann; A. Klehr; A. Knigge; G. Tränkle
- 10.30 – 11.00 **Metallic 3D Printed Rectangular Waveguides (WR3) for Rapid Prototyping of THz Packages**
S. Makhlof; B. Khani; J. Lackmann; S. Dülme; A. Stöhr
- 11.00 – 11.15 **Coffee Break**

Keynote

- 11.15 – 12.15 **Ke Wu**
Future Wireless – A Game-Changing Technology
Chair: *Andreas Stöhr*

Joint Session – IWMTS and MARIE

- 12.15 – 12.30 **Yaning Zou**
Pioneering the THz Range for Europe
- 12.30 – 13.30 **Lunch Break**

Keynotes

- 13.30 – 14.30 **Thomas Kürner**
Review on Channel Modeling and Measurements for THz Communications
Chair: *Thomas Kaiser*
- 14.30 – 15.00 **Heather Partner**
Inside the editorial process at Nature Communications
- 15.00 – 16.00 **Arogyaswami Paulraj**
Perspective of Mobile THz Communications
Chair: *Thomas Kaiser*

Conference organizer

University of Duisburg-Essen
Institute of Digital Signal Processing
Prof. Dr.-Ing. Thomas Kaiser
Bismarckstraße 81
47057 Duisburg | Germany

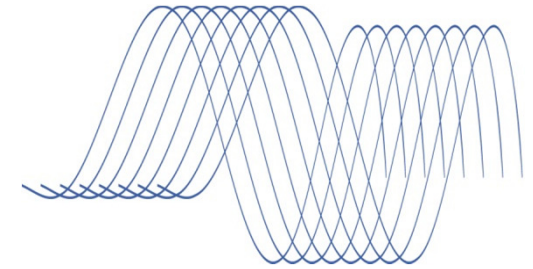


UNIVERSITÄT
DUISBURG
ESSEN

Open-Minded

IWMTS

INTERNATIONAL WORKSHOP ON
MOBILE THZ SYSTEMS



July 2nd – 4th, 2018

SportSchloss Velen
Velen, Germany



PROGRAM