

PROGRAM

Day 1 – Monday, July 3rd

09:45 – 10:00

Welcome Speech by Thomas Kaiser, IWMTS General Chair

Session 1 – Terahertz Technology Room 1

Session Chair: tba

10:00 – 10:30

Large-Signal Device Model Verification for Resonant Tunneling Diode Oscillator

E. Mutlu, S. Clochiatti, B. Sievert, R. Kress, A.
Possberg, M, Zhang, C. Preuss, A. Zhang, W.
Prost, D. Erni, N. Weimann

10:30 – 11:00

Average Harvested Power in THz WPT Systems Employing Resonant-Tunnelling Diodes

N. Shanin, S. Clochiatti, K. Mayer, L.
Cottatellucci, N. Weimann, R. Schober

11:00 – 11:30

Fully Differential 90 GHz and 180 GHz Signal Sources With Tuning Ranges of 24.1 GHz and 51.7 GHz in 90 nm SiGe-BiCMOS

D. Starke, F. Vogelsang, J. Wittemeier, C.
Bredendiek, K. Aufinger, N. Pohl

11:30 – 12:00

Ultra-Wideband Signal Source Tuneable From 86 GHz to 142 GHz in SiGe Technology

F. Vogelsang, D. Starke, J. Wittemeier, C.
Bredendiek, K. Aufinger, N. Pohl

Session 2 – tba Room 2

12:00 – 13:30

Lunch Break

Afternoon Session 1 – Keynote Talks Room 1

Session Chair: Ullrich Pfeiffer

13:30 – 14:30

Conformal antennas for THz wireless links
Speaker: Daniel Mittleman (Moderator: tba)

14:30 – 15:00

Coffee Break

15:00 – 16:00

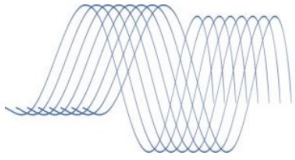
THz Light-Field Imaging
Speaker: Ullrich Pfeiffer (Moderator: tba)

16:00 – 17:00

terahertz.NRW - the THz network in and for NRW
Speaker: Dirk Nüßler (Moderator: tba)

18:00

Dinner / Social Event



PROGRAM

Day 2 – Tuesday, July 4th

Session 3 – Terahertz Passive Components Room 1 Session Chair: tba

09:00 – 09:30

Investigations on Feeding Networks for a Liquid Crystal-Based Leaky-Wave Antenna Array
P.-Y. Wang, A. Rennings, D. Erni

09:30 – 10:00

Array Design for Automotive MIMO Radar Sensors in D-Band
J. Wagner, T. Welling, N. Pohl, I. Rolfes, J. Barowski

10:00 – 10:30

Impact of Surface Structures on THz Reflection
S. Gassel, M. Hofmann, C. Brenner

10:30 – 11:00

11:00 – 11:30

Near-Field Truncation Error of a Mie-Series for a Perfect Electric Conducting Cylinder
M. Degen, A. Rennings, D. Erni

11:30 – 12:00

Approaching Dielectric Silicon Slot Waveguides for THz Frequencies by Simulation From Optical and Electrical Point of View
M. A. Burfeindt, J.K. Kother, L. Schmitt, J. Barowski, I. Rolfes, M. Hoffmann

12:00 – 12:30

Evaluation of Radar Cross-Section and Half Power Beamwidth of LCM-Printed Al₂O₃ Reflectors at Sub-THz Frequencies
J. Sánchez-Pastor, K.-D. Jenkel, M. Sakaki, R. Jakoby, N. Benson, A. Jiménez-Sáez

12:30 – 14:00

Session 4 - Terahertz Systems and Applications (1) Room 2 Session Chair: tba

A SiGe-Based D-Band Vector Modulator for PMCW Radar Applications
J. Witte-meier, N. Pohl

Super-Resolution of THz Time-Domain Images Based on Low-Rank Representation
M. Ljubenovic, A. Artesani, S. Bonetti, A. Traviglia

System Considerations for Mobile Breath Analysis Based on Terahertz Gas Spectroscopy
N. Rothbart, H.-W. Hübers

Coffee Break

3D Hybrid Delay-Phase Precoding Under True Time Delay Constraints
A. Najjar, M. El-Absi, T. Kaiser

Through-The-Wall Differential Distance Tracking With Ultra-High Repetition Rate Terahertz Time-Domain Spectroscopy
K. Kolpatzeck, D. Burkhart, J.C. Balzer, A. Czulwik

Terahertz Technologies for Non-Destructive Testing
D. Nüßler, W. Heinrich, A. Grimm, F. Friederich, G. Fischer, S. Chartier

Lunch Break

Afternoon Session 2 – Keynote Talks and Panel Session Room 1 Session Chair: tba

14:00 – 15:00

Advances in THz *in vivo* imaging of skin
Speaker: Emma MacPherson (Moderator: tba)

15:00 – 16:00

Introduction on the Cluster of Excellence Proposal “insightTHz”
Speaker: Thomas Kaiser

16:00 – 16:30

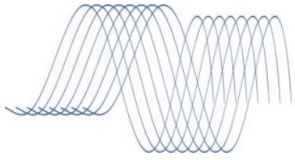
Coffee Break

16:30 – 17:45

Panel Session: Is “Miniaturization” the destiny of THz?
Panelists: tba

18:30

Dinner



PROGRAM

Day 3 – Wednesday, July 5th

Session 5 - Terahertz Systems and Applications (2)

Room 1

Session Chair: Mohammed El-Absi

09:00 – 09:30

Ultra Wide Band FMCW Transceiver Modules for Milimeter Wave Spectrum Analysis
K. Kother, J. Altholz, I. Rolfes, J. Barowski

09:30 – 10:00

Pulsed Free Space Photonic Vector Network Analyzers for Broadband Operation
F. Rushd Faridi, S. Preu

10:00 – 10:30

Multistatic 250 GHz Imaging Radar With 12x64 Elements
M. Kahl, R. Hussung, A. Keil, F. Friederich, P. Haring Bolívar

10:30 – 11:00

Coffee Break

11:00 – 11:30

Phase-Based Breathing Rate Monitoring in Patient Rooms Using 6G Terahertz Technology
S. Häger, A. Najjar, C. Bektas, D. Lessy, M. El-Absi, F. Sheikh, S. Böcker, T. Kaiser, C. Wietfeld

11:30 – 12:00

tba

12:00 – 12:30

tba

Session 6 - Insect and Plant Monitoring

Room 2

Session Chair: tba

detailed information tba

