



102nd ARFTG Microwave Measurement Conference
Software Architectures and Automation of Microwave Measurement Methods and Systems
Grand Hyatt San Antonio
San Antonio, TX, US, January 21-24, 2024

Monday, January 22nd

13:30-13:40

Welcome to the 102nd ARFTG Conference – Introduction

Conference Co-Chairs: Andrej Rumiantsev, Joe Gering

TPC Co-Chairs: Dennis Lewis and Jeffrey Jargon

13:40-15:00

Session A: Advances in Measurements I

Session Chair: Jeffrey Jargon

A1

13:40-14:20

Keynote: The Future of Microwave Measurements In a World of Learning Machines

Mark Pierpoint (Keysight)*

A-2

14:20-14:40

On downconverter noise characterization for LO waveform sensitivities

Jon Martens (Anritsu)*

A-3

14:40-15:00

An Adaptable Time Domain Gating Implementation with Enhanced Edge Treatment for Facilitating Vector Frequency Domain Data Analyses

Zhong Chen (ETS-Lindgren)*

15:00-15:50

Break – Exhibits

15:50-17:00

Session B: On-Wafer measurements and Calibration

Session Chair: Rusty Myers

B-1

15:50-16:20

Invited: On-wafer THz electronic characterization

Jerome Cheron (NIST)

B-2

16:20-16:40

Precision Printed Circuit Board Probing Into W-Band Frequencies

Hugo Morales (Modelithics Inc.); Larry Dunleavy (Modelithics)*; Chris DeMartino (Modelithics Inc.)

B-3

16:40-17:00

Error-Box Calibration of Three-Sampler VNAs

Ziad Hatab (Graz University of Technology)*; Michael E Gadringer (Graz University of Technology);
Wolfgang Bösch (Technical University of Graz)

Tuesday, January 23rd

8:20-9:30

Session C: Advances in Measurements II

Session Chair: Joe Gering

C-1

8:20-8:50

Complex modulation and signal recovery in high-frequency measurements

Dan van der Weide (AntenneX)



- C-2**
8:50-9:10 **D-Band Characterization of a Commercial High-Resistivity Silicon Calibration Substrate**
PEIZHUO YANG (National University of Singapore)*; Jiahao Wang (National University of Singapore); Koen Mouthaan (National University of Singapore)
- C-3**
9:10-9:30 **Double-pulse load-pull for trapping Characterization of GaN Transistors**
Mauro Marchetti (Anteverta-mw B.V.)*; Gustavo Avolio (Anteverta); Nikolai Balovnev (Anteverta-mw B.V.); Martino Lorenzini (Gallium Semiconductor)
- 9:30-10:10** **Break – Exhibits**
- 10:10-12:00** **Plenary Session**
- 12:00-13:30** **Lunch**
- 13:30-15:00** **Session D: On-Wafer and EVM Measurements**
Session Chair: Joel Dunsmore
- 13:30-13:50** **Business Meeting**
- D-1**
13:50-14:20 **Invited: Optimizing Vector Network Analyzer on-wafer LRRM calibration structures for measurement of GaAs devices**
Leonard Hayden (Qorvo)
- D-2**
14:20-14:40 **Discrimination between Noise and Distortion in EVM Measurements**
Jacques B Sombrin (TESA Laboratory)*; Benjamin Ros (CNES); Aurélien Chaumet (CNES)
- D-3**
14:40-15:00 **Identifying Quasi-Identical Power Amplifiers through EVM and NMSE Measurements of Output Data using Digital Post Distortion**
Nicholas A Ellis (Ohio State University)*; Patrick Roblin (Ohio State University)
- 15:00-15:50** **Break – Exhibits**
- 15:50-17:00** **Session E: Generalized Network Analysis and Load-Pull**
Session Chair: Dennis Lewis
- E-1**
15:50-16:20 **Invited: Remote-port network analysis: challenges in spatially-large setups**
Jon Martens (Anritsu)*
- E-2**
16:20-16:40 **Benchmarking a High Electron Mobility Transistor Using an Active Load-Pull System at 120 GHz -170 GHz**
Jing Wang (University of Glasgow)*
- E-3**
16:40-17:00 **Discussion on System-Level Wideband Active Load-Pull Linearity Measurements: How to Reach Broadband Design Techniques?**
Ricardo Figueiredo (University of Aveiro)*; Sanket Chaudhary (University of Aveiro); Marc Vanden Bossche (NI); Mohadig Rousstia (Ampleon); Mauro Marchetti (Anteverta-mw B.V.); Nuno Borges Carvalho (Instituto de Telecomunicacoes)