

Tuesday, January 19, 2021
9:45 am ET

Session A: Nonlinear Measurements and Modeling

**Modulation Analysis – A Novel Way to Characterize Components under Modulated Operating Conditions
(Invited Talk)**

Jan Verspecht (Keysight Technologies)

Linearity Measurement of 6G Receiver with One Transmission Frequency Extender Operating at 330 GHz

Marko E. Leinonen (University of Oulu)*; Klaus Nevala (University of Oulu); Nuutti Tervo (University of Oulu); Aarno Pärssinen (University of Oulu)

Surrogate Modeling-Based Acceleration of Multi-Harmonic Near-Field Measurements

Jonas Urbonas (Maury Microwave); Haris Votsi (University of Cyprus)*; Alexander Shakouri (Microsanj); Peter Aaen (Colorado School of Mines)

Emulation of a Multi-Stage Differential Amplifier Using One Single-Ended Device-Under-Test

Koen Buisman (Chalmers University of Technology)*; Jose-Ramon Perez-Cisneros (Chalmers University of Technology); William Hallberg (Qamcom IPR); Dhecha Nopchinda (Chalmers University of Technology); Peter Zampardi (Qorvo, Inc.)

Estimation of the Coverage Probability of S-Parameters for Safety-Critical Systems with Hotelling's T2 Distribution

Franz G. Aletsee (Augsburg University of Applied Sciences)*

Wednesday, January 20, 2021
9:45 am ET

Session B: Over-the-Air and On-Wafer Characterization

Uncertainty in mmWave Over-the-Air Test
(Panel Session)

Moderated by Dylan Williams (NIST) and Kate Remley (NIST)

Anomalies in Multiline-TRL-Corrected Measurements of Short CPW Lines

Gia Ngoc Phung (Physikalische Technische Bundesanstalt)*; Uwe Arz (Physikalisch-Technische Bundesanstalt (PTB))

Electromagnetic Field Measurements Above On-Wafer Calibration Standards

Haris Votsi (University of Cyprus)*; Jonas Urbonas (Maury Microwave); Stavros Iezekiel (University of Cyprus); Peter Aaen (Colorado School of Mines)

RF-dc Converter Optimization using MIMO Antennas and OTA Multi-Sine Calibration Method

Marina Jordao (Instituto de Telecomunicacoes, University of Aveiro)*; Daniel Belo (Instituto de Telecomunicacoes); Rafael F. S. (University of South Wales, Cardiff, UK, Instituto de Telecomunicações (IT), Delegação de Leiria, ESTG, Polytechnic Institute of Leiria, Portugal); Arnaldo Oliveira (Instituto de Telecomunicações, Universidade de Aveiro); Nuno Borges Carvalho (Instituto de Telecomunicacoes)

Automatic Probing System with Machine Learning Algorithm

Ryo Sakamaki (National Institute of Advanced Industrial Science and Technology)*; Masahiro Horibe (AIST)

Numerically Stable Digital Predistortion Model for Over-the-Air MIMO transmission

Shipra (IIT Roorkee)*; Meenakshi Rawat (Indian Institute of Technology, Roorkee, India)

Thursday, January 21, 2021
9:45 am ET

Session C: Traceability in Calibrations and Measurement Uncertainty

Traceability and Uncertainty – What Are They? And Why Do We Need Them?
(Invited Talk)

Nick Ridler (National Physical Laboratory)

Improvement of Measurement Uncertainty of THz Waveguide Vector Network Analyzers
Masahiro Horibe (AIST)*

Investigation on PIFA and Folded-IFA for TPMS Receiver

Abdellatif BOUYEDDA (XLIM)*; Bruno BARELAUD (XLIM); Laurent GINESTE (EXOTIC-SYSTEMS)

Classification of Plastic Materials using a Microwave Negative-Order-Resonance Sensor and Support-Vector-Machine

Dania Covarrubias-Martinez (CICESE)*; Oscar Martinez-Rodriguez (CETYS Universidad); Humberto Lobato-Morales (CICESE); Jose Medina-Monroy (CICESE)

Development of a Silicon Micromachined WM570 Waveguide Offset-Short Calibration Kit

James Champion (KTH Royal Institute of Technology, TeraSi AB)*; Bernhard Beuerle (KTH Royal Institute of Technology, TeraSi AB)

Characterization of Drilling Fluids for RF Communication

Patrick Cote (Montana Technological University)*