98th ARFTG Microwave Measurement Symposium

NIST-ARFTG SHORT COURSE on Microwave Measurements

January 16-17, 2022

Short Course Coordinators: J. Apolinar Reynoso and Basim Noori

Agenda

Sunday 16th morning, 8:00am-12:00pm

Fundamentals Measurements

- Microwave power and Traceability
 - Aaron Hagerstrom, NIST, email: aaron.hagerstrom@nist.gov
- Updating NIST's Traceability: S-Parameters and beyond Angela Stelson, NIST, email: angela.stelson@nist.gov
- Modern Network Analyzers Calibration Techniques
 Rusty Myers, Keysight Technologies,
 email: rusty.myers@keysight.com
- High-Speed Oscilloscopes, What the Manual Does't Tell you Paul D. Hale, NIST, email: paul.hale@nist.gov

Sunday 16th Afternoon, 2:00pm-5:00pm

On-Wafer Measurements

 Device Level Calibration and De-embedding Strategies for (sub)mm-wave Devices Technologies

Marco Spirito, Delf University of Technology, email: m.spirito@tudelft.com

• Basic Principles of Successful On-Wafer RF System Calibration

Andrej Rumiantsev, MPI Corporation,

email: andrej.rumiantsev@mpi-corporation.com

Over-The –Air Measurements

- Over-the –Air Testing of Wireless Devices
 Kate Remley, NIST, email: kate.remley@nist.gov
- 5G Millimeter Wave OTA Measurements: OTA Becomes Mainstream Roger Nichols, Keysight Technologies, email: roger_nichols@keysight.com

Monday 17th Morning: 8:00am-12:00pm

Nonlinear Measurements

- Measuring Modulation Distortion of Amplifiers, Mixers and Frequency Converters Using a Vector Network Analyzer
 Jan Verspecht, email: jan_verspecht@keysight.com
- Load Pull Measurements: An old Principle for New Technologies
 Andrea Ferrero, Keysight, email: andrea.ferrero@polito.it
- Time-Domain Low Frequency Active Harmonic Load-pull As a Tool for validating the theory of PA Modes of Operation

Apolinar Reynoso, CICESE, email: apolinar@cicese.mx

Everything You Can Do With Vector Nonlinear Microwave Measurements
 Patrick Roblin, The Ohio State University, email: roblin.1@osu.edu