Monday, January 21, 2019

Morning
8:30 to 10:00  NVNA Users’ Forum
              Chair: Patrick Roblin

10:30 to 12:00 On-Wafer Measurement Users' Forum
                 Chair: Andrej Rumiantsev

Afternoon
13:00 to 13:10 Welcome and Introduction
              Conference Co-Chairs: Joe Gering and Jon Martens
              TPC Co-Chairs: Patrick Roblin and Andrej Rumiantsev

13:10 to 14:35 Session A: Wireless Communication Test and Measurements
                 Chair: Patrick Roblin

“5G: Changing the Way We Work, Live and Play,” Dr. Michael O’Neal, Qorvo, Invited Guest Speaker (40 min)
A-1 “Novel Calibration Technique for Wideband Transmitters using Constellation Mapping,” Mr. Sidath Madhuwantha, National University of Ireland, Maynooth. Student Paper
A-2 “Modulated measurements and time-local signal level control,” Dr. Jon Martens, Anritsu.

14:35 to 15:50 Break – Interactive Forum and Exhibits

15:50 to 16:55 Session B: MM – Wave Measurements
                 Chair: Jon Martens

B-1 “A 3D printed TE10 rectangular to TE01 circular waveguide transition for polymer waveguide characterization,” Prof. Marco Spirito, TU Delft.
B-2 “Preliminary Study on WM-380 Waveguide TRL Calibration Line Standards at the UK’s National Physical Laboratory,” Dr. Xiaobang Shang, National Physical Laboratory.
B-3 “Three-Port Vector-Network-Analyzer Calibrations using the NIST Microwave Uncertainty Framework,” Dr. Jeff Jargon, National Institute of Standards and Technology.

18:00 to 19:00 Joint RWW/ARFTG Reception
Tuesday, January 22, 2019

**08:00 to 09:20**  
**Session C: Load-Pull and Large-Signal Measurements**  
Chair: Tony Gasseling and Jean-Pierre Teyssier

“Wideband Load-Pull Measurement Techniques: Architecture, Accuracy and Applications,” Dr. Mauro Marchetti, Maury Microwave, Invited Guest Speaker (35 min)

C-1 “Transient and Steady-State Thermal Measurements of GaN-on-SiC HEMT Transistors under Realistic Microwave Drive Conditions,” Mr. Jonas Urbonas, Advanced Technology Institute, University of Surrey.  
**Student Paper**

C-2 “Load Pull Bias Tee,” Dr. Gerard J. Bouisse, MACOM.

**09:20 to 10:45**  
Break- Exhibits

**10:45 to 11:50**  
**Session D: On-Wafer Measurements and Calibration**  
Chair: Leonard Hayden


D-2 “Low-Temperature Front-Side BEOL Technology with Circuit Level Multiline Thru-Reflect-Line Kit for III–V MOSFETs on Silicon,” Mr. Stefan Andric, Lund University.  
**Student Paper**

D-3 “Experimental Considerations on Accurate \( f_T \) and \( f_{max} \) Extraction for MOS Transistors Measured up to 110 GHz,” Dr. Johannes Rimmelspacher, University of Erlangen-Nuremberg.

**12:00 to 13:30**  
**ARFTG Awards Lunch**

**13:30 to 13:50**  
**ARFTG Business Meeting – ExCom Election, Bylaws Proposal, & Best Student Paper Vote**  
Past President: Jon Martens

**13:50 to 14:50**  
**Session E: Probing With and Without Contact**  
Chair: Andrej Rumiantsev

“Automated Performance of On-wafer Calibration and Characterization Using Non-Contact Probes,” Prof. Kuby Sertel, The Ohio State University, Invited Guest Speak (35 min)


**14:50 to 15:40**  
Break – Exhibits

**15:40 to 15:50**  
**ARFTG Business Meeting – Treasurer’s Report, ExCom Election Results, & ARFTG92 Best Student Paper Award**  
Treasurer: Ron Ginley, Past President: Jon Martens, & President: Dominique Schreurs

**15:50 to 16:55**  
**Session F: Microwave Measurement Needs for 5G: Invited Talk & Panel**  
Chair & Moderator: Peter Aaen

“Next Generation Microwave and Millimeter-Wave Measurement Techniques,” Dr. Kate Remley, National Institute of Standards and Technology, Invited Guest Speaker (35 min)

Dr. Michael O’Neal, Qorvo, **Invited Panel Member**  
Prof. Kubi Sertel, The Ohio State University, **Invited Panel Member**  
Dr. Mauro Marchetti, Maury Microwave, **Invited Panel Member**  
Dr. Kate Remley, NIST, **Invited Panel Member**

**16:55 to 17:00**  
**Next ARFTG Conference & Closing Statement**  
Conference Chair: Joe Gering
Interactive Forum Papers  
Monday, January 21, 2019  
14:35 to 15:50  
Chair: Rusty Myers

P-1 “Test of a Magnetic Field Distribution for Magnetrons,” Dr. Yang Jinsheng, Beijing Vacuum Electronics Research Institute.


P-4 “3D Reflectometer Design for Embedded RF Vector Measurement,” Ms. Hana Saied Mohamed, École de Technologie Supérieure. Student Paper