72nd Conference Technical Agenda Selections

Technical program with abstracts on www.arftg.org

Gating effects in time domain transforms (invited)
J. Dunsmore, Agilent Technologies

Measurements of characteristic impedance of high frequency cables with TDR
L. Navarro et al, Tyco Electronics

Comparison between root-impulse-energy and VNA methods for measuring loss on PCBs
M. Harper, et al, NPL-UK

Accurate wideband measurement of extreme impedances with a multistate reflectometer
A. Lewandowski, et al, Warsaw Univ of Technology, NIST

Statistical measurement techniques for equivalent source mismatch of 1.85 mm power splitter
T.M. Wallis, et al, NIST, Warsaw Univ of Technolgoy

An envelope domain measurement test setup to acquire linear S-parameters
E. Zenteno, et al, Univ of Gavle Sweden, Ericsson

Microwave characterization of optically modulated photo-induced switches with a passivation layer using an LSNA
C. Roda Neve, et al, UCL, VUB, KU Leuven Belgium

Nonlinear network analysis for modern communication devices
E. Zenteno, et al, Univ of Gavle Sweden, Ericsson

RF waveform metrology for characterization of NL amplifiers
D.A. Humphreys, et al, NPL, Bristol University UK

Load-pull + NVNA = enhanced X-parameters for PA designs
G. Simpson, et al, Maury Microwave, Agilent Technologies

A new technique for decreasing the characterization time of passive load-pull tuners to maximize measurement throughput
C. Roff, et al, Cardiff Univ UK, Freescale Semiconductor

Inexpensive solution to double RF bandwidth of vector sig gen
D. Schreurs, et al, KU Leuven, Belgium

Real time spectrum analysis reveals time domain characteristics of frequency-domain signals
T.C. Hill, Tektronix

Spectrum analyzer determination of synthesizer FM accuracy
Y.B. Lee, Anritsu

In-situ silicon integrated tuner for on-wafer 60-110 GHz noise
Y. Tagro, et al, ST Microelectronics, IEMN France

A new noise parameter method with 100x speed improvement
G. Simpson, et al, Maury Microwave, Agilent Technologies

Reciprocity-based multiport de-embedding sensitivity analysis
J. Martens, Anritsu

Traceability of VNA Measurements
K. Wong, Agilent Technologies

Cal substrate boundary influences on CPW characteristics
A. Rumiantsev, et al, Suss Microtec, FBH Germany, Maxim IP

Software solutions for linear and NL measurement and cal
A. Ferrero, et al, Politecnico di Torino, Italy

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72nd ARFTG Microwave Measurement Symposium

Time domain and Frequency Domain Measurement

Red Lion Jantzen Beach
Portland, OR
Dec. 9-12, 2008

Information and Registration
www.arftg.org

Invitation

The **Automatic RF Techniques Group** will hold its 72nd **Microwave Measurement Symposium** in Portland, Oregon. Join us as we explore ***Time Domain and Frequency Domain Measurement*** as reflected in measurement and modeling methodologies for the microwave and high-speed electronics communities. The Symposium includes the 72nd Microwave Measurement Conference, a short course, a users' forum, and two workshops. Register early!!

Location

Our scenic hotel is just a few miles from downtown Portland on an Island in the Columbia River forming the border between the states of Oregon and Washington. It is a great location with nearby shopping (no sales tax!) and many points of interest.

Red Lion Hotel on the River – Jantzen Beach
909 N. Hayden Island Drive
Portland, OR 97217
Phone +1-503-283-4466
Fax +1-503-283-4743
Email: info@redlionontheriver.com
http://tinyurl.com/arftgpdx group code:120672ND

All sessions will be at the Red Lion Hotel.

Reserve your hotel room at the Red Lion by November 17th to guarantee your lodging. Mention "72nd ARFTG Conference" to qualify for the special single/double rate of $106 + tax.

NIST/ARFTG Microwave Measurement Short Course

We present a 1.5 day microwave measurement tutorial. On the first day a broad overview on various microwave measurement techniques is presented. Topics include connectorized and on-wafer S-parameter measurement, power and large-signal measurement, thermal noise and phase noise measurement, and finally measurement uncertainty. The second morning focuses on the conference themes. Topics include oscilloscope and time domain network analyzer measurement, as well as signal integrity and power integrity measurement.

Scheduled Instructors: Joel Dunsmore – Agilent; Jon Martens – Anritsu; Brett Grossman, Michael Hill – Intel; Dominique Schreurs – KU Leuven; Nick Ridler – NPL; Dylan Williams, Tom Crowley, David Walker, Craig Nelson, Paul Hale – NIST.

Nonlinear Measurement Workshop

The Nonlinear Measurement Workshop theme is "Time-domain approaches: issues, solutions, and evaluations." Learn about the state-of-the-art of time-domain waveform measurement of active devices at microwaves. Experts of the field will present load-pull solutions, the possible applications of the information and give insights into accuracy issues and uncertainty causes. See the complete agenda at www.arftg.org.

Scheduled Speakers: Kate Remley – NIST, Johannes Benedikt – Cardiff University, Basim Noori – Freescale Semiconductor, Jan Verspecht – JanVerspect b.v.b.a., Sandro Pinarello – Infineon.

Organizer: Valeria Teppati – Politecnico di Torino

Multiport/Differential SI Workshop

The multiport/differential measurement for signal integrity workshop addresses the challenging issues of high-speed passive interconnects design and characterization. Several topics will be covered, ranging from crosstalk characterization of Multi-Gigabit BGA packaging to multiport VNA use and applications for backplane analysis and model validation using a new error vector magnitude technique. See the complete agenda at www.arftg.org.

Scheduled Speakers: Andrea Ferrero – Politecnico di Turino, Matthew Claudius – Intel, Heidi Barnes – Verigy, Jack Carrel – Xilinx, Julien Lintignat – XLIM Limoges.

Workshop organizers: Ali Boudiaf – Focus Microwaves, Mike Resso – Agilent Technologies.

NVNA Users' Forum

The Nonlinear VNA Users' Forum program will be available approximately one-month prior to the conference on the ARFTG web site. Those with potential agenda items should contact the forum organizers (see contact info on last page).

Spring Conference Submissions

Please see the web site for the spring conference Call for Papers –

Spring Conference Deadline: Dec. 27th

Schedule of Events

NIST/ARFTG Microwave Measurement Short Course	Tuesday Dec. 9 8:00 AM – 5:00 PM Wednesday Dec. 10 8:00 AM – 12:20 PM
Nonlinear Workshop	Wednesday Dec. 10 1:20 PM – 5:00 PM
ARFTG Microwave Measurement Conference	Thursday Dec. 11 8:00 AM – 5:00 PM Friday Dec. 12 8:00 AM – Noon
Awards Dinner River Cruise	Thursday Evening 6:00 PM – 9:30 PM
NVNA Users Forum	Friday Dec. 12 1:15 PM – 3:15 PM
Multiport-Differential Measurement Workshop	Friday Dec. 12 1:15 PM – 5:00 PM

Registration

Please see www.arftg.org for **on-line registration**.

Registration:	Before Nov. 24th	After Nov. 24th
Symposium Package *Includes conference, dinner cruise, workshops, and NVNA users' forum*	$610	$655
Complete Package *Includes symposium plus short course (all events)*	$910	$970
Short Course Only	$450	$485
Workshop Only	$150/wkshp	$165/wkshp
Conference Only	$445	$470
NVNA Users Forum Only	$15	$20
Guest Meal	$25	$25
Guest Dinner Cruise *Space permitting, priority given to conference goers*	$65	$65

Student/retiree rates – please see www.arftg.org.