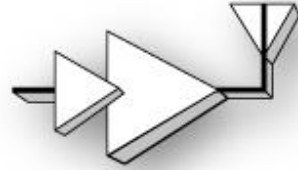


**2013 Power Amplifier Symposium
Advance Program**



Monday, September 9

7:30 *Registration and Continental Breakfast*

Welcome Session

8:15 "Welcome & Introduction to the Power Amplifier Symposium",
Jim Buckwalter, Paul Draxler

Session 1: Reconfigurable Antenna and Switch Techniques

8:30 "Co-Design of Power Amplifiers and High-Q Filters" (*Invited*),
Kenle Chen and Dimitrios Peroulis,
Purdue University, West Lafayette, IN

9:00 "Fully Depleted SOI on High Resistivity Substrate for Advanced Antenna Interfaces",
Thomas McKay and Jean-Pierre Raskin
Taliesin Technology, San Jose, CA and UCL, Louvain, Belgium

9:20 "Reconfigurable and Tunable Planar Antennas: Design Considerations and Challenges"
(*Invited*),
Satish Sharma,
San Diego State University, San Diego, CA

9:50 "Agile Front Ends for Scalable 4G Radios"(*Invited*),
Art Morris,
WiSpry, Irvine, CA

10:20 *Coffee break*

Session 2: GaN PAs

10:40 "GaN Technology for Energy Efficient Electronics" (*Invited*)
Karim Boutros,
HRL Laboratories, Malibu CA

11:10 "High Efficiency, Linear GaN Power Amplifier with In-Phase Power Combining for
IEEE 802.11p Applications",
Pilsoun Choi, Mengda Mao and Chirn Chye Boon,
Nanyang Technological University, Singapore

11:30 "Efficient, Broadband Outphasing Modulation for Class E Power Amplifiers" (*Invited*),
David Cripe, Anders Walker
Rockwell Collins, Cedar Rapids, IA

12:00 "A Robust 130-940MHz 100W Broadband Amplifier Utilizing a Plastic Packaged 48V
GaN HEMT",
Walter Nagy, Robert Sadler and Quinn Martin,
Nitronex, Durham, NC

12:20 LUNCH

Session 3: High-Efficiency PAs Using CMOS

1:20 "Digital Bits and Switching Power Amplifiers" (*Invited*),
Ali Niknejad,
University of California, Berkeley

1:50 "Low Power Transmitters for Body-Area Networks"(*Invited*),
Patrick Mercier and Vinod Sridharan,
University of California, San Diego

2:20 "Switched Capacitor PAs: Towards Efficient, Linear Amplification" (*Invited*),
Jeffrey Walling, Sangmin Yoo, and David Allstot,
University of Utah, University of Washington

2:50 *Coffee Break*

Session 4: Millimeter-Wave PAs

3:10 "Power Amplifiers using Sub-Quarter-Wavelength Baluns for Series-Connected Power Combining",
H-C Park, S. Daneshgar, J.C.Rode, Z. Griffith, M. Urteaga, B-S. Kim and Mark Rodwell
(*Invited*),
University of California, Santa Barbara, CA and Teledyne Scientific, Thousand Oaks, CA

3:20 "A Two-Stage 45 GHz Stacked PA with 30% PAE in 45-nm SOI CMOS",
Amir Agah, T. Kijisanayotin, P. Asbeck, L. Larson and J. Buckwalter,
University of California, San Diego

4:00 "Power-Efficiency Tradeoffs in CMOS Stacked FET Class D Power Amplifiers"
(*Invited*),
Ioannis Sarkas, Andreea Balteanu and Sorin Voinigescu,
Qualcomm, San Diego, CA and University of Toronto, Canada

4:30 "SiGe HBT Compact Modeling for Mm-Wave PAs" (*Invited*),
Michael Schroter, J. Krause, S. Lehmann, Y. Zimmermann, and P. Sakalas,
T U Dresden, Germany and UCSD

5:00 *Reception*

6:30 *Banquet*

Tuesday, September 10

7:30-8:25 *Registration and continental breakfast*

Session 5: High Efficiency Techniques and Load Modulation

- 8:30 “N-Dimensional Network Doherty Synthesis”” (*Invited*),
Gayle Collins,
MaXentric Technologies, La Jolla, CA
- 9:00 "Adaptive Doherty Power Amplifiers",
A. M. Mahmoud Mohamed, S. Boumaiza and R. R. Mansour,
University of Waterloo, Ontario, CA
- 9:20 "Direct Fast Load-Pull Algorithm for PAE and ACPR Optimization",
Matthew Fellows, Charles Baylis, Josh Martin, Lawrence Cohen and Robert Marks,
Baylor University, L-3 Research and U.S. Naval Research Laboratory
- 9:40 "Multi-Bit Pulsed Load Modulation (MB-PLM) for High Efficiency, Linear
Amplification of RF Signals" (*Invited*),
Ethan Wang,
University of California, Los Angeles

10:10 *Coffee break*

Session 6: Wideband PAs and Linearization Techniques

- 10:30 "Compact 0.5-5GHz Broadband Balun Using Field Transformation for Push-Pull Power
Amplifiers",
Young-Pyo Hong, Jonmei Yan, Kenji Mukai and Peter Asbeck,
University of California, San Diego and Mitsubishi Electric
- 10:50 "Offset Multisine for Enhance Characterization of Intermodulation and Memory Effects",
Saeed Farsi, Paul Draxler, Hamed Gheidi, Peter Asbeck and Dominique Schreurs,
KU Leuven, Belgium, and UCSD
- 11:10 "Broadband Feedforward Amplifier with a Novel Control Strategy for Improving the
Linearization of Second Loop",
Kai Xu, Li Chen and Hongxi Xue,
iMaple Tex Ltd, Kunshan, China
- 11:30 "A Stacked-FET Harmonic-Reject Mixer in SOI CMOS",
Cooper Levy, Peter Asbeck and James Buckwalter,
University of California, San Diego
- 11:50 “Digital PWM Algorithm for Switching-Mode Envelope Amplifiers Applied to 20MHz
LTE Signals”,
Hamed Gheidi, Y-P Hong, K. Mukai, S. Shinjo and P. Asbeck,
University of California San Diego, and Mitsubishi Electric
- 12:10 “Class E Power Amplifiers with Tuned RC Output Matching Circuit”,
Praveen Gunturi and David Koteki,
University of Maine, Orono, ME