

Thursday Parallel Session #1

		TUTORIAL SESSION - Thursday, April 7		Room: Belleair
8:00 AM	RA-1	High Efficiency Power Amplifiers	Steve Cripps	Hywave Associates
9:40 AM	BREAK	Sponsored by RF Micro De	evices	
		TUTORIAL SESSION - Thursday, April 7		Room: Belleair
10:00 AM	RA-1	High Efficiency Power Amplifiers	Steve Cripps	Hywave Associates
12:00 PM	LUNCH	Sponsored by Trak Micro	wave	
		TUTORIAL SESSION - Thursday, April 7		Room: Belleair
1:00 PM	RA-2	Techniques for Analyzing Electrically Small Wireless Antenna Lattice Structures	Richard Remski	Ansoft
3:00 PM	BREAK	Sponsored by RF Micro De	evices	
		TUTORIAL SESSION - Thursday, April 7		Room: Belleair
3:20 PM	RA-3	Linearization: Reducing Distortion in Power Amplifiers	Allen Katz	Linearizer Technology
6-7 pm		Poster Session & Reception - Sponsored by Ag	ilent Technologies	
7-9 pm		Dinner - Sponsored by Anritsu, Applied Wave Rese	arch and Mini-Circuits	





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Thursday Parallel Session #2

	Paper	ANTENNAS - Thursday, April 7	Chair: J. Cu	Ilver, Co-Chair: B. King	Room: Redington
8:00 AM	RB-1	"Synthesis of Antenna Arrays Using Gradient Based Differential Evolution Algorithm in the Presence of Mutual Coupling" Seyyed Razavi, Karim Aghdam, Mahmoud Kamarei			
8:20 AM	RB-2	"Antenna Array Output Power Minimization Using Steepest Descent Adaptive Algorithm," S. Johnson and D. Snider. University of South Florida.			
8:40 AM	RB-3	"A Wideband Circularly Polarized Rectenna" R.D		Power Transmission to Embedded Sens ity of South Carolina	sors" M. Ali, G. Yang,
9:00 AM	RB-4	"RF MEMS Phase Shifters and Their Application in Phased Array Antennas" Maximilian Scardelletti, George Ponchak, A Zaman, Richard Lee.			
9:20 AM	RB-5	"Designing Ultra-thin Printed Dipole Arrays Based on EBG Reflection Phase Profile" M.F. Abedin, M. Ali. University of South Carolina			
9:40 AM	BREAK	S	ponsored by I	RF Micro Devices	
	Paper	COMMUNICATIONS I - Thu	· · ·		Room: Redington
10:00 AM	RC-1	"Multipath Fading in Airframes at 2.4 GHz" C			
10:20 AM	RC-2	"Channel Equalization and ICI Mitigation for OFDM Systems in Time Selective Channels" M. Chennaoui, M. Berbineau, A. Riveng, J. Assaad. INRETS-LEOST			
10:40 AM	RC-3	"Adaptive Low-rank MIMO-OF	DM Channel I	Estimation", M. Ozdemir . Syracuse Uni	iversity.
11:00 AM	RC-4	"A Low Power MIC S-Band Transceiver Ar		mplantable Devices" A.Tekin, M.Yuce, V	W. Liu - University of
12:00 PM	LUNCH		Sponsored by	Trak Microwave	
	Paper	POWER AMPLIFIERS - Thursday, Apr	il 7 Chair: S	. Wood, Co-Chair: J. Paviol	Room: Redington
1:00 PM					
	RD-1	"Current Techniques for Enhancing the Eff	iciency of Ultra	a Linear Power Amplifiers" Richard Abra	ahams. Harris Corp.
1:20 PM	RD-1 RD-2		·	a Linear Power Amplifiers" Richard Abra Ku-Band," Matthew Ozalas. The MITR	
1:20 PM 1:40 PM		"High Efficiency Class-F MMIC Powe	er Amplifiers at wth Prediction	Ku-Band," <i>Matthew Ozalas. The MITR</i>	RE Corporation
	RD-2	"High Efficiency Class-F MMIC Powe	er Amplifiers at wth Prediction <i>Larson, P.M. A</i> S Power Ampli	Ku-Band," <i>Matthew Ozalas. The MITR</i> of Power Amplifiers using Correlation T <i>sbeck. University of California</i>	RE Corporation
1:40 PM	RD-2 RD-3	"High Efficiency Class-F MMIC Powe "Nonlinearity Estimation and Spectral Regro <i>Galton, L.E.</i> "Design and Optimization of a 5 GHz CMO "Filter Considerations in Polar Transmitters fo	er Amplifiers at wth Prediction <i>Larson, P.M. A</i> S Power Amplii <i>Fl</i> o or Multi-mode V	Ku-Band," <i>Matthew Ozalas. The MITR</i> of Power Amplifiers using Correlation T <i>isbeck. University of California</i> fier" Yus Ko, William R. Eisenstadt, Jim orida	RE Corporation Techniques" M.Y. Li, I.
1:40 PM 2:00 PM	RD-2 RD-3 RD-4	"High Efficiency Class-F MMIC Powe "Nonlinearity Estimation and Spectral Regro <i>Galton, L.E.</i> "Design and Optimization of a 5 GHz CMO "Filter Considerations in Polar Transmitters fo <i>Univers</i>	er Amplifiers at wth Prediction <i>Larson, P.M. A</i> S Power Ampli <i>Flo</i> or Multi-mode V <i>sity, Denmark &</i>	Ku-Band," Matthew Ozalas. The MITR of Power Amplifiers using Correlation T sbeck. University of California fier" Yus Ko, William R. Eisenstadt, Jim orida Wireless Applications" Y. Huang, Y. Wa	RE Corporation Techniques" M.Y. Li, I.
1:40 PM 2:00 PM 2:20 PM	RD-2 RD-3 RD-4 RD-5	"High Efficiency Class-F MMIC Powe "Nonlinearity Estimation and Spectral Regro <i>Galton, L.E.</i> "Design and Optimization of a 5 GHz CMO "Filter Considerations in Polar Transmitters fo <i>Univers</i>	er Amplifiers at wth Prediction Larson, P.M. A S Power Ampli Flo or Multi-mode V sity, Denmark & ponsored by I	Ku-Band," <i>Matthew Ozalas. The MITR</i> of Power Amplifiers using Correlation T sbeck. University of California fier" Yus Ko, William R. Eisenstadt, Jim orida Nireless Applications" Y. Huang, Y. Wa & University of California	RE Corporation Techniques" M.Y. Li, I.
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1:40 PM 2:00 PM 2:20 PM 3:00 PM 3:20 PM 3:40 PM	RD-2 RD-3 RD-4 RD-5 BREAK Paper RE-1 RE-2	"High Efficiency Class-F MMIC Powe "Nonlinearity Estimation and Spectral Regro <i>Galton, L.E.</i> "Design and Optimization of a 5 GHz CMO "Filter Considerations in Polar Transmitters for <i>Univers</i> S NEW TECHNOLOGIES - Thurso "Ferroelectric Thin Films For R "Die-on-wafer and Wafer-level 3D Integrati <i>Devarajan, K. Ros</i> Slow-Wave Phase Shifter Design and Applica "Wideband RF-MEMS Shunt Switches with I	er Amplifiers at wth Prediction Larson, P.M. A S Power Amplii Flo or Multi-mode V sity, Denmark & ponsored by I lay, April 7 F Device Appli on for Millimete e, R.J. Gutmar ations, Balaji La	Ku-Band," <i>Matthew Ozalas. The MITR</i> of Power Amplifiers using Correlation T <i>isbeck. University of California</i> fier" Yus Ko, William R. Eisenstadt, Jim orida Nireless Applications" Y. Huang, Y. Wa & University of California RF Micro Devices Chair: R. Abraham cations" Stephen Gilbert. Agilent Techr er-Wave Smart Antenna Transceivers" on. Rensselaer Polytechnic Institute akshminarayanan and Tom Weller, Univ	RE Corporation Techniques" M.Y. Li, I. In Paviol. University of ang, T. Larsen. Aalborg Room: Redington nologies. Mona Hella, J.Lu, S.
1:40 PM 2:00 PM 2:20 PM 3:00 PM 3:20 PM 3:40 PM 4:00 PM	RD-2 RD-3 RD-4 RD-5 BREAK Paper RE-1 RE-2 RE-3	"High Efficiency Class-F MMIC Powe "Nonlinearity Estimation and Spectral Regro <i>Galton, L.E.</i> "Design and Optimization of a 5 GHz CMO "Filter Considerations in Polar Transmitters fo <i>Univers</i> S NEW TECHNOLOGIES - Thurso "Ferroelectric Thin Films For R "Die-on-wafer and Wafer-level 3D Integrati <i>Devarajan, K. Ros</i> Slow-Wave Phase Shifter Design and Applica "Wideband RF-MEMS Shunt Switches with I Or	er Amplifiers at wth Prediction Larson, P.M. A S Power Ampli File or Multi-mode V sity, Denmark & ponsored by I lay, April 7 F Device Appli on for Millimete e, R.J. Gutmar ations, Balaji La High Reliability nodera, Yi Zha	Ku-Band," Matthew Ozalas. The MITR of Power Amplifiers using Correlation T isbeck. University of California fier" Yus Ko, William R. Eisenstadt, Jim orida Wireless Applications" Y. Huang, Y. Wa & University of California RF Micro Devices Chair: R. Abraham cations" Stephen Gilbert. Agilent Techr er-Wave Smart Antenna Transceivers" in. Rensselaer Polytechnic Institute akshminarayanan and Tom Weller, Univ for Microwave and Millimeter Wave App	RE Corporation Techniques" M.Y. Li, I. In Paviol. University of ang, T. Larsen. Aalborg Room: Redington nologies. Mona Hella, J.Lu, S.





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Friday Parallel Session #1

	Paper	PLENARY SESSION - Friday, April 8 Chair: R. Pengelly Room: Sand P			
8:30 AM	FA-1	Wireless Systems for Battlespace Dominance: Basic Research Challenges John Kosinski U.S. Arm			
9:20 AM	FA-2	Recent Trends in Wireless Computer-Aided Design Zoltan Cendes Ansoft			
10:10 AM	BREAK	Sponsored by Ansoft			
	Paper	MODELING - Friday, April 8 Chair: V. Cojocaru, Co-Chair: T. Weller Room: Reding			
10:30 AM	FB-1	"Prediction of Harmonic Tuning Performance in pHEMTs" ¹ Ravi Varanasi, ¹ Charles Baylis, ² William Clausen, ¹² Dr. Larry Dunleavy - ¹ University of South Florida, ² Modelithics Inc.			
10:50 AM	FB-2	"Non Linear Transient Simulation of Microwave Circuits and Systems" Thomas J. Brazil - University College Dublin, Ireland			
11:10 AM	FB-3	"Fast Numerical Simulation of Inductors and Transformers for Use in a Circuit Design Environment" Rex Lowther, Yiqun Lin- Conexant Corporation			
11:30 AM	FB-4	"Real-time Concurrent Design of Adaptive High-Frequency Circuits" Michael C. Hemlich, Christos Komninakis, Joel Kirchman - Applied Wave Research Inc.			
11:50 AM	FB-5	"Modeling of On-Chip Interconnect Lines in RF Circuits Using 'Biointelligence' " Rex Lowther, Yiqun Lin, Gregg Croft, Jim Furir Zhenyu Teng - Conexant Corporation, Joseph Czagas, Robert Lomenick - Intersil Corporation			
12:30 PM	LUNCH	Sponsored by M/A-Com			
	Paper				
L		INTEGRATED CIRCUITS - Friday, April 8 Chair: B. Kane, Co-Chair: G. Remoundos Room: Reding			
1:30 PM	FC-1	INTEGRATED CIRCUITS - Friday, April 8 Chair: B. Kane, Co-Chair: G. Remoundos Room: Reding "A Low-Power Tunable SiGe HBT LNA for Wireless LAN Applications" Corrado Carta, Jong Carls, Werner Bachtold - Swiss Federal Institute of Technology			
1:30 PM 1:50 PM		"A Low-Power Tunable SiGe HBT LNA for Wireless LAN Applications" Corrado Carta, Jong Carls, Werner Bachtold - Swiss			
	FC-1	"A Low-Power Tunable SiGe HBT LNA for Wireless LAN Applications" Corrado Carta, Jong Carls, Werner Bachtold - Swiss Federal Institute of Technology			
1:50 PM	FC-1 FC-2	"A Low-Power Tunable SiGe HBT LNA for Wireless LAN Applications" Corrado Carta, Jong Carls, Werner Bachtold - Swiss Federal Institute of Technology "Broadband SiGe Monolithic Microwave Control Circuits" R. Tayrani- Raytheon Space & Airborne Systems			
1:50 PM 2:10 PM	FC-1 FC-2 FC-3	"A Low-Power Tunable SiGe HBT LNA for Wireless LAN Applications" Corrado Carta, Jong Carls, Werner Bachtold - Swiss Federal Institute of Technology "Broadband SiGe Monolithic Microwave Control Circuits" R. Tayrani- Raytheon Space & Airborne Systems "A sub-1mA LC SiGe BiCMOS 1.6 GHz differential VCO with KV reduction" David K.Hornol " A Low-Power Dual-Band BiCMOS Front-End for Wireless LAN Receivers" Corrado Carta, Rolf Vogt, Werner Bachtold - Swi			
1:50 PM 2:10 PM 2:30 PM	FC-1 FC-2 FC-3 FC-4	 "A Low-Power Tunable SiGe HBT LNA for Wireless LAN Applications" Corrado Carta, Jong Carls, Werner Bachtold - Swiss Federal Institute of Technology "Broadband SiGe Monolithic Microwave Control Circuits" R. Tayrani- Raytheon Space & Airborne Systems "A sub-1mA LC SiGe BiCMOS 1.6 GHz differential VCO with KV reduction" David K.Homol "A Low-Power Dual-Band BiCMOS Front-End for Wireless LAN Receivers" Corrado Carta, Rolf Vogt, Werner Bachtold - Swis Federal Institute of Technology 			
1:50 PM 2:10 PM 2:30 PM 2:50 PM	FC-1 FC-2 FC-3 FC-4 BREAK	 "A Low-Power Tunable SiGe HBT LNA for Wireless LAN Applications" Corrado Carta, Jong Carls, Werner Bachtold - Swiss Federal Institute of Technology "Broadband SiGe Monolithic Microwave Control Circuits" R. Tayrani- Raytheon Space & Airborne Systems "A sub-1mA LC SiGe BiCMOS 1.6 GHz differential VCO with KV reduction" David K.Homol "A sub-1mA LC SiGe BiCMOS Front-End for Wireless LAN Receivers" Corrado Carta, Rolf Vogt, Werner Bachtold - Swis Federal Institute of Technology Sponsored by Eagleware "Performance of a 12GHz Monolithic Microwave Distributed Oscillator in 1.2V 0.18µm CMOS with a New Simple Design 			











Friday Parallel Session #2

	Paper		Room: Sand Ke		
8:30 AM	FA-1	Wireless Systems for Battlespace Dominance: Basic Research Challenges John Kosinski	U.S. Army		
9:20 AM	FA-2	Recent Trends in Wireless Computer-Aided Design Zoltan Cendes	s Ansoft		
10:10 AM	BREAK	Sponsored by Ansoft			
	Paper	COMMUNICATIONS II - Friday, April 8 Chair: J. Frolik	Room: Bellea		
10:30 AM	FD-1	"A New Approach to SDMA Using Spreading Sequences as Array Weights" Frank Gross, FAMU-FSU College of Engineering, David Schmidt, Greenwich Technology Associates			
10:50 AM	FD-2	"Comparision of Self-Adaptive Wireless Networks Using Mobile Base Stations and Mobile Access Points" Jaeseok Kim, Jenshan Lin - University of Florida			
11:10 AM	FD-3	"In situ Atmospheric Profiling Using Mobile Ad-hoc Sensor Networks" Mark, Adams, John Manobianco, James Bickford, Donna Manobianco. ENSCO Inc.			
	FD-3	Manobianco. ENSCO Inc.			
11:30 AM	FD-3	Manobianco. ENSCO Inc. "Performance of Multi-Path Routing in MANET with Long Tailed Traffic" Zafar Q. Taha, Xian Lu			
11:30 AM 12:30 PM					
	FD-4	"Performance of Multi-Path Routing in MANET with Long Tailed Traffic" Zafar Q. Taha, Xian Lu	Room: Bellea		
	FD-4	"Performance of Multi-Path Routing in MANET with Long Tailed Traffic" Zafar Q. Taha, Xian Lu Sponsored by M/A-Com	Room: Bellea		
12:30 PM	FD-4	"Performance of Multi-Path Routing in MANET with Long Tailed Traffic" <i>Zafar Q. Taha, Xian Lu</i> Sponsored by M/A-Com ULTRA WIDEBAND - Friday, April 8 Chair: B. Perlman "A New CPW - Fed Slot Antenna for Ultra-Wide Band Application" <i>M. Ali, Y. Hu, A.T.M. Sayem, R. Usaha, Univ</i>	versity of South		
12:30 PM 1:30 PM	FD-4 LUNCH Paper FE-1	"Performance of Multi-Path Routing in MANET with Long Tailed Traffic" <i>Zafar Q. Taha, Xian Lu</i> Sponsored by M/A-Com ULTRA WIDEBAND - Friday, April 8 Chair: B. Perlman "A New CPW - Fed Slot Antenna for Ultra-Wide Band Application" <i>M. Ali, Y. Hu, A.T.M. Sayem, R. Usaha, Univ</i> <i>Carolina</i> "Low-Cost UWB Front-End System for Pulsed Radar Automotive Applications at 24GHz" Vicentiu Cojocaru, TL	versity of South		
12:30 PM 1:30 PM 1:50 PM	FD-4 LUNCH Paper FE-1 FE-2	"Performance of Multi-Path Routing in MANET with Long Tailed Traffic" Zafar Q. Taha, Xian Lu Sponsored by M/A-Com ULTRA WIDEBAND - Friday, April 8 Chair: B. Perlman "A New CPW - Fed Slot Antenna for Ultra-Wide Band Application" M. Ali, Y. Hu, A.T.M. Sayem, R. Usaha, Univ Carolina "Low-Cost UWB Front-End System for Pulsed Radar Automotive Applications at 24GHz" Vicentiu Cojocaru, TU Ireland "A Discrete Fully Logical and Low Cost Sub-Nanosecond UWB Pulse Generator" Jean Schwoerer, Benoit Misco	versity of South DK Electronics opein, ² Bernard		

Sponsors: Agilent Technologies, Anritsu, Applied Wave Research, Ansoft, Eagleware, Harris, M/A-COM, Mini Circuits, RF Café, RF Micro Devices, Trak Microwave

Organizers: USF WAMI Center, Cree Microwave, US Army CERDEC/RDECOM, IEEE Student Branch (USF), IEEE MTT/AP/ED FWCS, USF EE Dept., USF College of Engineering

Exhibitors: Acqiris, Cree Microwave, Electrorent, Keithley, Leader Tech, Modelithics, Tektronix, TRS RenTelco







