

MONDAY - APRIL 15, 2024

TRACK 1

TRACK 2

7:00 AM	Breakfast (Exhibitors Madeira/Indian Shores)	
8:00 AM	<b>M1A: Advancements in Power Amplifiers (Bellaire)</b> Session chairs: Larry Dunleavy (University of South Florida, USA) and Kenle Chen (University of Central Florida, USA)	<b>M2A: Radar Workshop (Reddington)</b> Session chairs: Stavros Vakalis (University of South Florida, USA)
8:00 AM	<b>Invited Paper: A Brief Overview of Reconfigurable PA Technologies</b> Dominic Mikrut and Patrick Roblin (The Ohio State University, USA); Hsiu-Chen Chang (Ohio State University, USA); Shane Smith, Ramy Tantawy and Josh Coffey (SenseICs, USA); David Frey (CAES, USA)	
8:20 AM	<b>Invited Paper: Reconfigurable Power Amplifiers for Spectrum Sharing in Arrays</b> Charles Baylis (Baylor University, USA); Dimitrios Peroulis (Purdue University, USA); Austin Egbert and Justin Roessler (Baylor University, USA); Alden Fisher (Purdue University, USA); Robert J. Marks (Baylor University, USA).	
8:40 AM	<b>Invited Paper: Zeroth-Order Optimization for Self-Interference Cancellation in STAR Front-End</b> Michelle Pirrone (University of Colorado Boulder & National Institute of Standards and Technology, USA); Grant Giesbrecht and Emiliano Dall'Anese (University of Colorado Boulder, USA); Taylor Barton (University of Colorado, Boulder, USA)	<b>Advances in Radar Imaging and Inverse Profiling of Objects in Layered Media</b> Ahmad Hoorfar (Villanova University, USA) <b>Distributed Phased Arrays: Coordinating Wireless Systems at the Wavelength Level</b> Jeffrey Nanzer (Michigan State University, USA) <b>Radar-Embedded Communication Waveforms and System Implementations</b> Justin Metcalf (University of Oklahoma, USA)
9:00 AM	<b>Invited Paper: A Modern Framework to Incorporate Measured Load Pull Data in Power Amplifier Design</b> Matthew Ozalas and Jason Boh (Keysight, USA)	
9:20 AM	<b>Hybrid Load-Modulated Double-Balanced Amplifier (H-LMDBA) with Four-Way Load Modulation and &gt; 15-dB Power Back-off Range</b> Shadman Fuad Bin Faruquee, Jiacchen Guo, Kenle Chen and Pingzhu Gong (University of Central Florida, USA)	
9:40 AM	Break - Coffee with Exhibitors (Longboat Key)	
10:00 AM	(Bellaire / Reddington) Welcome Message	
10:10 AM	Keynote Address #1 <b>Accelerating Wireless and Microwave Innovation - No Excuses!</b> Matt Casto (Midwest Microelectronics Consortium, USA)	
10:50 AM	Plenary Address #1 <b>RFSOI for the RF Front-End: Then, Now and Tomorrow</b> Julio Costa (Global Foundries, USA)	
11:30 AM	Exhibitor Spotlight (Bellaire / Reddington)	
11:50 AM		

**Lunch (Watercolor)**

1:10 PM

**M1B: Integrated Amplifiers (Bellaire)**

Session chairs: Matthew Ozalas (Keysight, USA) and Craig Sapashe (Keysight, USA)

**M2B: Advancements in Radar Technologies (Reddington)**

Session chairs: Jay McDaniel (University of Oklahoma, USA) and Arya Menon (Texas A&M University, USA)

1:10 PM

**Invited Abstract: GaN MMIC Power Amplifiers for Broadband, Efficient and Linear Transmitters**  
Zoya Popovic [University of Colorado, Boulder, USA]

**Invited Abstract: Challenges for Adaptive and Cognitive Radar in Congested Spectrum**  
Justin Metcalf (University of Oklahoma, USA)

1:30 PM

**A 1.8 dB Noise Figure 5.3-7.4 GHz BW3dB CMOS LNA for 802.11ax Applications**  
Xinyi Jiang, Chunqi Shi, Leilei Huang and Long Xu (East China Normal University, China); Hao Deng and JingHong Chen (University of Houston, USA); Runxi Zhang (East China Normal University, China)

**Invited Paper: Dynamic Management of Digital Array Resources for Radar Target Tracking**  
Nathan A Goodman (University of Oklahoma, USA)

1:50 PM

**Efficiency Enhancement by Sizing Device Periphery for Supply-Modulated Power Amplifiers**  
Reyes Lucero (University of Colorado, USA); Connor Nogales (University of Colorado Boulder, USA); Zoya Popovic (University of Colorado at Boulder, USA)

**Decentralized Localization of Distributed Phased Array Elements Using High-Accuracy Ranging and Multidimensional Scaling**  
Matthew J Dula, Naim Shandi and Jeffrey Nanzer (Michigan State University, USA)

2:10 PM

**An 830-MHz CMOS Switch-Mode Power Amplifier Under Time-Multiplexing Outphasing Operation**  
Toshifumi Nakatani (Maxentric Technologies, LLC, USA); Travis Wambach (MaXentric Technologies LLC, USA); Edward Falcon (MaXentric Technologies, LLC, USA); Aly Fathy (University of Tennessee, USA)

**Non-Cooperative High-Efficiency Multi-User Ranging Using OFDM Signals**  
Mehmet Yazgan (University of South Florida, USA); Huseyin Arslan (Istanbul Medipol University, USA); Stavros Vakalis (University of South Florida, USA)

2:30 PM

**Break / Exhibitor Showcase- Coffee with Exhibitors (Madeira / Indian Shores)**

3:00 PM

**M1C: Systems, Components, and Signal Processing for Communications (Bellaire)**

Session chairs: Justin Metcalf (University of Oklahoma, USA) and Satheesh Bojja Venkatakrishnan (Florida International University, USA)

**M2C: Electromagnetics Interactions with the Human Body (Reddington)**

Session chairs: Tom Weller (Oregon State University, USA) and Michael Grady (USA)

3:00 PM

**Digitally-Augmented Wideband Self-Interference Cancellation In Full-Duplex Transceiver**  
Kefayet Ullah (Florida International University, USA & American International University Bangladesh, Bangladesh); Satheesh Bojja Venkatakrishnan and John L. Volakis (Florida International University, USA)

**Invited Paper: Impact of Multi-Path Wave Propagation on Specific Absorption Rate in Layered Dielectrics**  
Rachel E Jarvis (University of Oklahoma, USA); Jay W McDaniel (University of Oklahoma & Advanced Radar Research Center, USA)

3:20 PM

**Physical Layer Security using Chaotic Antenna Arrays in Point-to-Point Wireless Communications**  
Thomas Ranstrom (University of South Florida & Interdigital Inc., USA); Huseyin Arslan (Istanbul Medipol University, USA); Gokhan Mumcu (University of South Florida, USA)

**Ferromagnetic Resonance Identification (FMR-ID) under Low Magnetic Field for mmWave RFID**  
Md Toaha Anas and Alex Wege (University of Minnesota); Allison Harpel, Yicong Chen, Rhonda Franklin and Bethanie J.H. Stadler (University of Minnesota, USA)

**3:40 PM An Ultra-Wideband Microstrip Gain Equalizer on Thin-Film Ceramic for Future Millimeter Wave Applications up to and Beyond 120 GHz**

Andre Scheder and Tim Pfahler (Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany); Anna Bridier (Rohde and Schwarz, Germany); Martin Vossiek (LHFT, Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany)

**4:00 PM Compact 150 GHz and 300 GHz Dual-Band On-Chip Antenna for Future Communication and Sensing Applications**

Tim Pfahler (Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany); Jan Schür (Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU), Germany); Martin Vossiek (LHFT, Friedrich-Alexander-Universität Erlangen Nürnberg, Germany)

**Millimeter-wave Body Scan**

Wenyi Shao (Northrop Grumman & Johns Hopkins University, EMAI LLC, USA)

**Tissue Thickness Effects on Radiometric Internal Body Temperature Measurements**

Sofia Mvokany (University of Colorado Boulder, USA); Zoya Popovic (University of Colorado at Boulder, USA)

4:20 PM

**Poster Session (Exhibitors)**

5:30 PM

5:30 PM

**Ski Show & Reception (Poolside)**

7:30 PM

6:30 PM

**Banquet (Poolside)**

7:30 PM