

MONDAY - APRIL 17, 2023

TRACK 1

TRACK 2

7:00 AM

Breakfast (St. Martins/St. Lucia)

8:00 AM

M1A: Advances in Power Amplifiers - 1 (Aruba)

M2A: Additive Manufacturing for RF Applications (Barbados)

8:00 AM

Invited Talk: Silicon-Based Millimeter-Wave Power Amplifiers with Efficiency-Enhancement, Sensen Li (University of Texas at Austin, USA)

Laser Enhanced Direct-Print Additive Manufacturing (LE-DPAM) of mm-Wave using LTCC Dielectric Paste for High Temperature Applications, Seng Loong Yu (Embry-Riddle Aeronautical University, USA); Christopher Curran and Anton Polotai (Vibrantz Technologies, USA); Eduardo Rojas (Embry-Riddle Aeronautical University, USA)

8:20 AM

Invited Talk: Towards High-Power and Multi-Way Silicon-Based mmWave Doherty Power Amplifiers, Taiyun Chi (Rice University, USA)

Ultra Wideband Powerdetector for W-Band Applications Using a Novel Additively Manufactured Wavemodetransducer, Tobias Bader (Friedrich-Alexander-Universität Erlangen Nürnberg, Germany)

8:40 AM

Co-Design of Doherty Power Amplifier and Post-Matching Bandpass Filter, Haifeng Lyu, Ricardo Lovato, Shakthi Priya Gowri, Xun Gong and Kenle Chen (University of Central Florida, USA)

3D-Printing with Conductive Filament for Electromagnetic Shielding Applications, Isabela Buitron Burbano (Universidad de Los Andes, Colombia); Alba Avila Bernal (Andes University, Colombia); Carlos Andres Perez-Lopez (Universidad de Los Andes, Colombia)

9:00 AM

Load-Modulated Double-Balanced Amplifier with Quasi-Isolation to Load, Jiachen Guo and Kenle Chen (University of Central Florida, USA)

Printed, Planar Microwave Connector with multiple signal lines, Jotham Kasule (University of Massachusetts, USA); Alkim Akyurtlu (University of Massachusetts Lowell, USA); Craig Armiento (1 University Ave & UMass Lowell, USA)

9:20 AM

A High-IP3 Harmonic Tuned Wideband 40 dBm RF Power Amplifier for 5G Applications, Heather Song (University of Colorado, Colorado Springs, USA); Tanghid Rashid (University of Colorado Colorado Springs, USA)

3D-Printed Low-Profile X-Band Tunable Phase Shifter, Hanxiang Zhang (Florida State University, USA); Ryan Bahr (Georgia Institute of Technology, USA); Bayaner Arigong (Florida State University, USA)

9:40 AM

Break - Coffee with Exhibitors (St. Martins/St. Lucia)

10:00 AM

Plenary Session (Grand Caribbean Ballroom)
Energy sustainability for Net Zero Radio Communications

Prof. Nuno Borges Carvalho, Departamento de Electrónica, Telecomunicações e Informática, Instituto de Telecomunicações, Universidade de Aveiro, Portugal

11:10 AM

Exhibitor Spotlight (Grand Caribbean Ballroom)

11:50 AM

Lunch (Patio Pavilion)

1:10 PM M1B: Active Circuits (Aruba)

M2B: Sensors and Systems (Barbados)

1:10 PM Dynamic Supply Modulation of a 6 - 12 GHz Transmit Array, Connor Nogales and Laila F Marzall (University of Colorado Boulder, USA); Gregor Lasser (Chalmers University of Technology, Sweden); Zoya Popovic (University of Colorado at Boulder, USA)

Invited Paper: Gas-Liquid Two-Phase Flow Monitoring Using Sub-THz Radar Imaging, Davi V. Q. Rodrigues and Daniel Rodriguez (Texas Tech University, USA); Victor J Pugliese (Universidad del Norte, Colombia); Marshall Watson (Texas Tech University, USA); Changzhi Li (Texas Tech University, USA)

1:30 PM A Dual-Channel 15 Gb/s PRBS Generator for a D-Band PMCW Radar Transmitter in 22 nm FDSOI, Florian Probst, Andre Engelmann and Manuel Koch (Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany); Robert Weigel (Friedrich-Alexander Universität Erlangen-Nürnberg, Germany)

A Hybrid Skin, Fat, and Muscle Human Body Tissue-Mimicking Biological Phantom and Antenna Testbed, Michael Grady (Georgia Tech Research Institute, USA); Thomas Weller (Oregon State University, USA)

1:50 PM A Fully-Integrated Band-Switchable CMOS Low Noise Amplifier, Seyyed Babak Hamidi Perchehkolaei and Debasis Dawn (University of Washington, USA)

Frequency Characterization for Glucose Detection with Software Defined Radio, Faheem Shaikh (California State University Fresno, USA); Soumyasanta Laha (California State University, Fresno, USA)

2:10 PM Sub-6 GHz GaAs pHEMT SPDT Switch with Low Insertion Loss and High Power Handling Capability Using Dual-Gate Technique, Jaehyun Kwon (Intelligent Microwave Systems Lab, Soongsil University, Korea (South)); Jinho Yoo and Jaeyong Lee (Soongsil University, Korea (South)); Taehun Kim (Intelligent Microwave Systems Lab, Soongsil University, Korea (South)); Changkun Park (Soongsil University, Korea (South))

Real Time Monitoring of Helicopter Turbine Blade Temperature Using Passive Wireless Sensor, Sreekala Suseela, Taofeek Orekan, Swadipta Roy and Joshua McConkey (Sensatek Propulsion Technology, Inc., USA); Reamonn Soto (Sensatek Propulsion Technology, Inc, USA)

2:30 PM	Break - Coffee with Exhibitors (St. Martin/St. Lucia)	
2:50 PM	M1C: Antennas and Passives - 1 (Aruba)	M2C: Emerging Applications (Barbados)
2:50 PM	A Miniaturized UHF RFID Tag Antenna Attached to a Container of Filled Liquid , Minh-Tan Nguyen (National Kaohsiung University of Science and Technology, Taiwan); Hua-Ming Chen (National Kaohsiung University of Applied Sciences, Taiwan); ChienHung Chen (ROC Air Force Academy, Taiwan); Yi-Fang Lin (National Kaohsiung University of Science and Technology, Taiwan)	Invited Paper: Millimeter-Wave Silicon Photonics Circuits with Automatic Calibration for Wireless Communications , Kamran Entesari (Texas A&M University, USA); Ramy Rady, Samuel Palermo and Christi Madsen (Texas A&M University, USA)
3:10 PM	Computation of Input Impedance of Rectangular Waveguide-backed Metasurface Arrays with Feed Networks using Coupled Dipole Framework , Insang Yoo (Duke, USA); David Smith (Duke University, USA)	Invited Paper: Active and Passive Reconfigurable Intelligent Surfaces at mm-Wave and THz bands enabled by CMOS Integrated Chips , Suresh Venkatesh (North Carolina State University, USA)
3:30 PM	Advanced Cascaded Filter Synthesis , Wael M Fathelbab (Northrop Grumman Corporation, USA)	An Inkjet-Printed Capacitive Sensor for Ultra-Low-Power Proximity and Vibration Detection , Steven D Gardner (University of Alabama at Birmingham (UAB), USA); M Muklasur R Opu (University of Alabama at Birmingham, USA); Mohammad R Haider (University of Alabama at Birmingham (UAB), USA)
3:50 PM	A New Axial Mode Helix Antenna "The Archimedean Screw Antenna" , Francis Parsche, None (Harris Corporation & Special Antennas Group, USA)	A Low-Cost Consumable Radio Frequency Emitter for Adversary Threat Emulation , Timothy Graziano (Instructor, United States Military Academy); Zachary Wolsborn, Sebastien Wilkinson and Samuel Della-Santina (United States Military Academy, USA); Kirk Ingold (Instructor, United States Military Academy, USA)
4:10 PM	Exhibitor Showcase (St. Martin/St. Lucia)	
4:40 PM	Poster Session (Barbados)	
6:00 PM	Reception and Banquet	

6:30 PM

7:30 PM

