

TUESDAY - APRIL 18, 2023

TRACK 1

TRACK 2

TRACK 3

7:00 AM

Breakfast (St. Martin/St. Lucia)

8:00 AM

T1A: Advances in Power Amplifiers - 2 (Aruba)

Session chairs: Prof. Sensen Li (University of Texas at Austin) and Prof. Taiyun Chi (Rice University)

T2A: Passives and Antennas - 2 (Barbados)

Session chairs: Dr. Michael Grady (Georgia Tech Research Institute) and Prof. Hjalti Sigmarsson (University of Oklahoma)

8:00 AM

Invited Talk: Millimeter-Wave GaN MMICs, Timothy Sonnenberg and Anthony Romano (University of Colorado Boulder, USA); Zoya Popovic (University of Colorado at Boulder, USA)

Invited Talk: New Developments for Interference Tolerant Phased Arrays, Leopold E. Pellon (Otava Inc.)

8:20 AM

Magnetic-Less Simultaneous Transmit and Receive Front End using Highly Efficient GaN-Based Quadrature Balanced Amplifier, Niteesh Bharadwaj Vangipurapu (University of Central Florida & INSPIRE GROUP, USA); Kenle Chen (University of Central Florida, USA)

Conformal Retrodirective TM System for Future Generation Launch Vehicles, Umair Naeem (Centre for Wireless Innovation, ECIT Institute, Queen's University Belfast, United Kingdom (Great Britain)); Neil Buchanan (Queens University Belfast, United Kingdom (Great Britain))

8:40 AM

Wide Band CMOS Power Amplifier with High Flatness Using Inter-Digit Transformer and RC-Feedback, JaeHeon Cho (Intelligent Microwave Systems Lab. & Soongsil University, Korea (South)); Jaeyong Lee and Changkun Park (Soongsil University, Korea (South))

Higher-Order Filtering Attenuator Design Considerations for Filter Shape Optimization, Jonathan M Knowles (The University of Oklahoma, USA); Hjalti Sigmarsson (University of Oklahoma, USA); Jay W McDaniel (University of Oklahoma & Advanced Radar Research Center, USA)

9:00 AM

Temperature Dependent Large-Signal Modeling of GaN HEMTs at Ka-Band using the ASM-HEMT, Nicholas C Miller (Air Force Research Laboratory & Sensors Directorate, USA); Alexis Brown (Ardent, USA); Michael Elliott (SelectTech Services, USA); Ryan Gilbert (KBRWyle, USA)

Bonding Film Based 280 GHz Circularly Polarized Antenna Array Design, Seiji Nishi and Kazuhiko Tamesue (Waseda University, Japan); Tetsuya Kawanishi (Waseda University & National Institute of Information and Communications Technology, Japan); Toshio Sato, Takuro Sato and San Hlaing Myint (Waseda University, Japan)

9:20 AM

A High-Power RF GaN Amplifier Using Bondwire Transformer for Interstage Match, Marvin N Marbell (Wolfspeed, USA)

Highly Energy Efficient 64-element Array Antenna Based on Cu/Co Metaconductor and Fused Silica, Hae-In Kim, Alexander Wilcher and Woosol Lee (University of Florida, USA); Shelby Nelson (Mosaic Microsystems, USA); Yong-Kyu Yoon (University of Florida, USA)

AI/ ML Workshop, Prof. Linda Katehi, Texas A&M University
(St. Thomas Boardroom)
Moderator: Dr Arya Menon, Texas A&M University

9:40 AM

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

10:00 AM

Keynote Session (Grand Caribbean Ballroom)

Reconfigurable Communications: Electronics, Materials and Systems

Dr. Holger Maune, Chair of Microwave and Communication Engineering, Otto von Guericke University Magdeburg

Student Day Activities

Chair: Prof. Satheesh Bojja (Florida International University)

11:10 AM

WAMICON Award Announcements (Grand Caribbean Ballroom)

11:50 AM

Lunch (Patio Pavilion)

1:10 PM

T1B: Recent Developments in Communication Systems (Aruba)

Session chairs: Prof. Stavros Vakis (University of South Florida) and Daniel Ramirez (L3Harris)

T2B: Artificial Intelligence for RF and Wireless (Barbados)

Session chairs: Prof. Gokhan Mumcu (University of South Florida) and Dr. Arya Menon (Texas A&M University)

1:10 PM

Cellular Digital Post-Distortion: Signal Processing Methods and RF Measurements, Huseyin Babaroglu, Lauri Anttila and Guixian Xu (Tampere University, Finland); Matias Turunen (Tampere University of Technology, Finland); Markus Allén and Mikko Valkama (Tampere University, Finland)

Invited Paper: Intelligent Spectrum Sharing Between LTE and Wi-Fi Networks using Muted MBSFN Subframes, Merkebu Girmay and Pablo Avila-Campos (Ghent University - Imec, Belgium); Vasilis Maglogiannis (Ghent University - imec & IDLab Research Group, Belgium); Dries Naudts (Ghent University & Imec, Belgium); Adnan Shahid (Ghent University - imec, Belgium); Ingrid Moerman (Ghent University - imec, Belgium)

1:30 PM

EM Side-Channel Analysis of Data Leakage Near Embedded Bluetooth Low Energy Modules, Vishnuvardhan V Iyer (The University of Texas at Austin, USA); Ali Yilmaz (University of Texas at Austin, USA)

Invited Paper: Deep Learning-based RF Fingerprint Authentication with Chaotic Antenna Arrays, Justin McMillen, Gokhan Mumcu and Yasin Yilmaz (University of South Florida, USA)

1:50 PM

Performance Analysis of 5G New Radio V2X Communication, G G Md Nawaz Ali, Sameer Ahmed Sharief, Mohammad Nazmus Sadat and Md Suruz Miah (Bradley University, USA)

Automated Radar Data Labeling through Computer Vision, Jasmin Gabsteiger (Friedrich-Alexander-University Erlangen-Nuremberg, Germany), Timo Maiwald (Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany), Simon Wünsche (Friedrich-Alexander-University, Germany), Robert Weigel (Friedrich-Alexander Universität Erlangen-Nürnberg, Germany), Fabian Lurz (Hamburg University of Technology, Germany)

2:10 PM

Low-Power Smart Selective LTE Jammer for Search and Rescue Applications using Software-Defined Radio, Christian Dorn (Technical University of Munich & Chair of Micro- and Nanosystems Technology, Germany); Andreas Depold and Thomas Kurin (Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany); Fabian Lurz (Hamburg University of Technology, Germany); Amelie Hagelauer (Technical University of Munich, Germany)

Deep Learning-Based ASM-HEMT High Frequency Parameter Extraction, Fredo P Chavez (Macquarie University, Australia), Sourabh Khandelwal (Macquarie University, Australia)

VNA 101 Workshop with Copper Mountain Technologies (St. Thomas Boardroom)

Brian Walker, Sr. RF Engineer SME
Copper Mountain Technologies

2:30 PM

Exhibitor Showcase (St. Martin/ St. Lucia)

3:00 PM

Women in Microwaves and Young Professionals Event (Grand Caribbean Ballroom)

Dr. Amanda Schrand (Air Force Research Laboratory (AFRL/RW)),
Prof. Sandra Cruz-Pol (National Science Foundation),
Dr. Emma Briot (Qorvo),
Prof. Rhonda Franklin (University of Minnesota (UMN)),
Prof. Jay McDaniel (University of Oklahoma)

4:30 PM

WiM/YP Reception (Deck Tent)

6:00 PM