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Ajibayo Adeyeye¹, Charles Lynch¹, Aline Eid¹, Jimmy Hester², Manos M. Tentzeris¹
*¹Georgia Tech, USA **A** ; ²Atheraxon, USA **A***
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- (MWCL)
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Chair: Jahnvi Sharma, Intel, USA — Co-Chair: Hiroshi Okazaki, NTT DOCOMO, Japan

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Junren Pan¹, Jin He¹, Yao Peng¹, Hao Wang¹, Sheng Chang¹, Qijun Huang¹, Jiankang Li²
¹Wuhan University, China  ; ²CETC 55, China 
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N. Yahav, R. Levinger, J. Kadry, G. Horovitz, Intel, Israel 

We1G: Microwave Photonics and Nanotechnology

Chair: Luca Pierantoni, Università Politecnica delle Marche, Italy





Co-Chair: Mona Jarrahi, University of California, Los Angeles, USA

- (MWCL)
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Stephan Kruse¹, Sergiy Gudyriev¹, Tobias Schwabe¹, Pascal Kneuper¹, Heiko G. Kurz², J. Christoph Scheytt¹
¹Universität Paderborn, Germany  ; ²Volkswagen, Germany 
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¹Lookin, USA  ; ²University of California, Los Angeles, USA 
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Martino Aldrigo¹, Mircea Dragoman¹, Sergiu Iordanescu¹, Dan Vasilache¹, Adrian Dinescu¹, Giorgio Biagetti², Luca Pierantoni², Davide Mencarelli²
¹IMT Bucharest, Romania  ; ²Università Politecnica delle Marche, Italy 

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Kuanchen Xiong¹, Gang Qiu², Yixiu Wang², Lei Li¹, Alexander Göritz³, Marco Lisker³, Matthias Wietstruck³, Mehmet Kaynak³, Wenzhuo Wu², Peide D. Ye², Asher Madjar⁴, James C.M. Hwang¹

¹Cornell University, USA  ; ²Purdue University, USA  ; ³IHP, Germany  ; ⁴Lehigh University, USA 

We2B: Heterogeneous and High-Density Flex RF Package Integration

Chair: Markondeya Raj Pulugurtha, Florida International University, USA

Co-Chair: Premjeet Chahal, Michigan State University, USA

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Renuka Bowrothu¹, Hae-In Kim¹, Connor Smith¹, Xin N. Guan², Shanying Cui², Florian Herrault², David P. Arnold¹, Yong-Kyu Yoon¹

¹University of Florida, USA  ; ²HRL Laboratories, USA 

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In-Package Additively Manufactured Sensors for Bend Prediction and Calibration of Flexible Phased Arrays and Flexible Hybrid Electronics

Xuanke He, Manos M. Tentzeris, Georgia Tech, USA 

(MWCL)
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Additive Manufacturing of a Wideband Capable W-Band Packaging Strategy

Michael Thomas Craton¹, John D. Albrecht², Premjeet Chahal², John Papapolymerou²

¹MIT Lincoln Laboratory, USA  ; ²Michigan State University, USA 

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An Ultra-High-Frequency Wirelessly-Powered Smart Bandage for Wound Monitoring and Sensing Using Frequency Modulation

Dieff Vital, John L. Volakis, Shubhendu Bhardwaj, Florida International University, USA










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Chair: Jun Choi, SUNY Buffalo, USA — Co-Chair: Maurizio Bozzi, Università di Pavia, Italy

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Nhu-Huan Nguyen¹, Anthony Ghiotto², Anne Vilcot¹, Ke Wu³, Tan Phu Vuong¹
¹IMEP-LAHC (UMR 5130), France ; ²IMS (UMR 5218), France ; ³Polytechnique
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Zhi Li¹, Nathan Chordas-Ewell¹, Jun H. Choi¹, Dongyin Ren², Ryan Wu²,
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¹SUNY Buffalo, USA ; ²NXP Semiconductors, USA ; ³University of Oklahoma,
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100GHz**
Tim Pfahler, Gerald Gold, K. Lomakin, Lukas Engel, Jan Schür, Martin Vossiek, FAU
Erlangen-Nürnberg, Germany 





We2D: Advanced Microwave and mm-Wave Device Modeling Techniques

Chair: Shahed Reza, Sandia National Laboratories, USA — Co-Chair: Q.J. Zhang, Carleton University, Canada

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Amplifier Design with ASM-HEMT**
Jason Hodges¹, Sayed Ali Albahrani², Bryan Schwitter³, Sourabh Khandelwal¹
¹Macquarie University, Australia ; ²Fraunhofer IAF, Germany ; ³Altum RF,
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Venkata Pawan Sriperumbuduri¹, Hady Yacoub², Tom K. Johansen²,
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¹BTU, Germany ; ²FBH, Germany 
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Aneesh Venugopal, R.H. Victora, University of Minnesota, USA 

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Chair: J.-C. Chiao, Southern Methodist University, USA — Co-Chair: Chung-Tse Michael Wu, Rutgers University, USA

- (MWCL)
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Ismail H. Uluer¹, Mark J. Jaroszeski², Thomas M. Weller¹
¹Oregon State University, USA  ; *²University of South Florida, USA* 

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Chair: José Angel García, Universidad de Cantabria, Spain

Co-Chair: Mark van der Heijden, NXP Semiconductors, The Netherlands

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Tzu-Yuan Huang, Sensen Li, Naga Sasikanth Mannem, Hua Wang, Georgia Tech, USA 
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Munkyo Seo¹, Ahmed S.H. Ahmed², Utku Soylu³, Ali A. Farid³, Yunsik Na¹, Mark J.W. Rodwell³
¹Sungkyunkwan University, Korea  ; *²Marki Microwave, USA*  ; *³University of California, Santa Barbara, USA* 
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Wenjian Liu, Brian Romanczyk, Matthew Guidry, Nirupam Hatui, Christian Wurm, Weiyi Li, Pawana Shrestha, Xun Zheng, Stacia Keller, Umesh K. Mishra, University of California, Santa Barbara, USA 
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Tso-Wei Li¹, Sensen Li², Hossein Miri Lavasani³, Hua Wang¹
¹Georgia Tech, USA  ; *²Samsung, USA*  ; *³Case Western Reserve University, USA* 

We2G: Analog and Mixed Signal ICs for Wireline and Optical Communication






Chair: Edward Gebara, Nanowave Technologies, USA

Co-Chair: Christian Carlowitz, FAU Erlangen-Nürnberg, Germany, Germany

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Xiaoteng Zhao¹, Yong Chen¹, Xuqiang Zheng², Pui-In Mak¹, Rui P. Martins¹
¹University of Macau, China ; ²CAS, China 
- (MWCL)
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Teruo Jyo, Munehiko Nagatani, Yoshihiro Ogiso, Shogo Yamanaka, Hideyuki Nosaka, NTT, Japan 
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Ming-Zheng Wu, Shang Hong, Huan-Min Su, Shawn S.H. Hsu, National Tsing Hua University, Taiwan 






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Chair: Marcus Da Silva, National Instruments, USA — Co-Chair: Jon Martens, Anritsu, USA

- (MWCL)
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Mario Mueh, Susanne Brandl, Philipp Hinz, Christian Waldschmidt, Christian Damm, Universität Ulm, Germany 
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Tom Phelps, Zhe Zhang, Gabriel M. Rebeiz, University of California, San Diego, USA 
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Ilona Piekarz¹, Jakub Sorocki¹, Nicolo Delmonte², Lorenzo Silvestri², Stefania Marconi², Gianluca Alaimo², Ferdinando Auricchio², Maurizio Bozzi²
¹AGH UST, Poland ; ²Università di Pavia, Italy 
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Patrick Walkemeyer, Burghard Lipphardt, Michael Kazda, PTB, Germany 







We3C : Nonlinear and Nonreciprocal Transmission Lines

Chair: Jason Soric, Raytheon, USA — Co-Chair: George Eleftheriades, University of Toronto, Canada

- (MWCL)
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*Mohamed Saeed¹, Ahmed Hamed¹, P. Palacios¹, Burkay Uzlu², Zhenxing Wang²,
Eyyub Baskent¹, Renato Negra¹*
¹RWTH Aachen University, Germany  ; ²AMO, Germany 
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*Shaghayegh Vosoughitabar, Minning Zhu, Chung-Tse Michael Wu, Rutgers University,
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Sajjad Taravati, George V. Eleftheriades, University of Toronto, Canada 








We3D: Advance in Phase Change Materials for Microwave Applications

Chair: Pierre Blondy, XLIM (UMR 7252), France — Co-Chair: Raafat R. Mansour, University of Waterloo, Canada

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*Nabil El-Hinnawy, Greg Slovin, Chris Masse, Paul Hurwitz, Jefferson Rose,
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*Greg Slovin, Nabil El-Hinnawy, Chris Masse, Jefferson Rose, David Howard, Tower
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*Farooq Amin¹, Thomas Beglin¹, Nicholas Edwards¹, Nabil El-Hinnawy², Greg Slovin²,
David Howard², Doyle Nichols¹, Robert M. Young¹*
¹Northrop Grumman, USA  ; ²Tower Semiconductor, USA 
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Production SiGe BiCMOS Process**
Dimitrios Baltimas, Gabriel M. Rebeiz, University of California, San Diego, USA 






We3E: Linearization and Transmitter Techniques for Power Amplifiers

Chair: Allen Katz, Linearizer Technology, USA — Co-Chair: John Wood, Wolfspeed, USA

- (MWCL)
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José A. García, M. Nieves Ruiz, Ana Cordero, David Vegas, Universidad de Cantabria, Spain 
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Gautam Jindal¹, Gavin T. Watkins², Kevin Morris¹, Tommaso Cappello¹
¹University of Bristol, UK  ; ²Toshiba Europe Research, UK 
- (MWCL)
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Alberto Brihuega, Lauri Anttila, Mikko Valkama, Tampere University, Finland 
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Xiangjie Xia¹, Ying Liu¹, Chenxing Li¹, Wenbo Guo¹, Chengzhe Shi¹, Shihai Shao¹, Lang Lei², Youxi Tang¹
¹UESTC, China  ; ²CETC 54, China 


We3F: mm-Wave and Sub-mm-Wave Power Generation

Chair: Michael Roberg, Qorvo., USA — Co-Chair: Joe Qiu, U.S. Army Research Laboratory, USA

- (MWCL)
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Fabian Thome, Arnulf Leuther, Fraunhofer IAF, Germany 
- (MWCL)
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Ruibing Dong, Shinsuke Hara, Issei Watanabe, Satoru Tanoi, Tatsuo Hagino, Akifumi Kasamatsu, NICT, Japan 

We3G: Innovative Technologies for Machine To Machine and Human To Machine Interactions











Chair: Rodrigo Camacho, Intel, Mexico — Co-Chair: Kenneth Mays, Boeing, USA

- (MWCL)
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Jie Yang¹, Baibhab Chatterjee¹, Mattias Thorsell², Mikael Kowalewski², Brian Edward³, Dimitrios Peroulis¹, Shreyas Sen¹
¹Purdue University, USA  ; ²Saab, Sweden  ; ³Saab, USA 
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Haoyang Wu, Jingyi Ma, Intel, China 
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Gerd Schuppener, Tolga Dinc, Jack Blauert, Waleed Ahmad, Domingo Garcia, Hassan Ali, Benjamin Cook, Swaminathan Sankaran, Texas Instruments, USA 








WeF1: Interactive Forum — Wednesday












Chair: Premjeet Chahal, Michigan State University, USA and Taiyun Chi, Rice University, USA











Co-Chair: Michael Craton, MIT Lincoln Laboratory, USA and Amanpreet Kaur, Oakland University, USA










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Yin-Cheng Chang¹, Ta-Yeh Lin¹, Chao-Ping Hsieh¹, Ping-Yi Wang², Shawn S.H. Hsu³, Da-Chiang Chang¹
¹NARLabs-TSRI, Taiwan  ; ²GUC, Taiwan  ; ³National Tsing Hua University, Taiwan 
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Utpal Dey, Yizhang Li, Jan Hesselbarth, Universität Stuttgart, Germany 
- (MWCL)
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Alper Güner¹, Thomas Mausolf¹, Jan Wessel¹, Dietmar Kissinger², Klaus Schmalz¹
¹IHP, Germany  ; ²Universität Ulm, Germany 
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Kevin Erkelenz, Noah Sielck, Anton Sieganschin, Thomas Jaschke, Arne F. Jacob, Technische Universität Hamburg-Harburg, Germany 
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Chair: Emanuel Cohen, Technion, Israel — Co-Chair: William Deal, Northrop, USA

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¹Johannes Kepler Universität Linz, Austria  ; ²ZF Friedrichshafen, Germany  ; ³LCM, Austria 






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¹FBH, Germany  ; ²Technical University of Denmark, Denmark 
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Chair: Glenn Hopkins, Georgia Tech, USA — Co-Chair: Abbas Omar, OvG Universität Magdeburg, Germany

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Chair: Vittorio Camarchia, Politecnico di Torino, Italy — Co-Chair: Spyridon Pavlidis, North Carolina State University, USA

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¹Marki Microwave, USA  ; ²University of California, Santa Barbara, USA  ; ³Sungkyunkwan University, Korea  ; ⁴Teledyne Scientific & Imaging, USA 
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¹IBM T.J. Watson Research Center, USA  ; ²Columbia University, USA  ; ³Rutgers University, USA 
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Chair: Samet Zahir, Renesas Electronics, USA — Co-Chair: Taiyun Chi, Rice University, USA

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