



LAMC 2016
PUERTO
VALLARTA



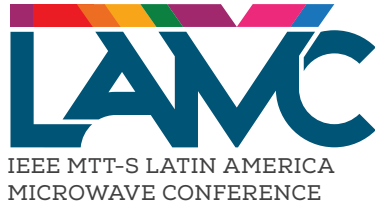
IEEE MTT-S LATIN AMERICA
MICROWAVE CONFERENCE



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LAMC 2016 / PROGRAM BOOK





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LAMC-2016 General Chair

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Table of Contents



About LAMC.....	06
Welcome Message from the LAMC-2016 General Chairs.....	08
Technical Program Committee Chair’s Message.....	10
Organizational Committee.....	11
International Advisory Committee.....	13
Technical Program Reviewers’ Committee.....	15
General Schedule.....	17
Keynote Speakers.....	21
Special Sessions.....	25
Regular Sessions.....	35
Poster Sessions.....	43
Exhibition.....	47
Networking and Social.....	50
Industrial Sponsors.....	52
Venue Layout.....	53
Puerto Vallarta Map.....	54



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About LAMC



The IEEE MTT-S Administrative Committee approved in 2015 an initiative to create the IEEE MTT-S Latin America Microwave Conference (LAMC), to be held in the second week of December, every two years, starting in 2016. LAMC will have a general scope on RF and microwave engineering and technologies. This international conference is expected to move around to different locations in the region (Argentina, Brazil, Chile, Colombia, Mexico, Peru, etc.). It will aim to achieve a high technical quality and will be technically and financially sponsored by IEEE MTT-S.

The IEEE MTT-S Latin America Microwave Conference has the following general goals:

- To encourage technological, scientific and academic development in Latin American countries
- To promote participation in global MTT-S events
- To encourage the development of local MTT-S activities
- To increase MTT-S membership in Latin America
- To increase local interest and perception of relevance of MTT-S with respect to the local needs (cf. MTT-S Humanitarian Initiative)



LAMC 2016 PUERTO VALLARTA

Welcome Message from the LAMC-2016 General Chairs



On behalf of the Organizational Committee, it is our pleasure to welcome all of you to the first IEEE MTT-S Latin America Microwave Conference (LAMC-2016). With the main purpose of promoting technological, scientific, and academic development in Latin America, we have assembled an excellent set of world-class technical talks, including truly outstanding keynote speakers, highly relevant invited special sessions, excellent regular and poster sessions, as well as a two-day exhibition blending high-tech companies, government agencies, and academic institutions.

We are pleased to announce that LAMC-2016 enabled the participation of technical presentations of authors from the following Latin American countries: Argentina, Brazil, Chile, Colombia, Costa Rica, Ecuador, Mexico, Nicaragua, and Peru. Additionally, our technical program was enriched by papers submitted from countries in other geographical regions: Canada, China, France, Germany, India, Italy, Japan, Korea, Pakistan, Spain, UK, Ukraine, and USA.

Aligning the IEEE Humanitarian Activities Committee (HAC) with the MTT-S and AP-S Special Interest Group in Humanitarian Technology (SIGHT), and with the enthusiastic support from MTT-S Young Professionals, we are offering as part of LAMC-2016 a Special Session entitled "Enabling Information and Communications Technologies (ICT) for Humanitarian Aid", introducing several humanitarian initiatives involving wireless RF technologies with impactful changes.

In conjunction with LAMC-2016 technical sessions, our two-day exhibition includes high-tech companies that represent the state-of-the art in the region when it comes to materials, components, and test/measurement equipment, as well as design and simulation software. Our exhibition also includes Mexican government agencies promoting high-tech industry investment and development, as well as local research centers and universities.

Balancing our technical activities, LAMC-2016 social program offers unique opportunities for networking and cultural experiences. Our gala dinner will be quite unconventional, at the secluded cove of Las Caletas, with ancient civilization live music and pre-Hispanic Mexico's dances, giving us the opportunity of a scenic ocean cruise across Bandera's Bay.

We welcome all delegates to Puerto Vallarta, Mexico, for an exciting technical and social program at LAMC-2016.



José Ernesto Rayas-Sánchez
ITESO - The Jesuit U. of
Guadalajara, Mexico
LAMC-2016 General Chair



George E. Ponchak
NASA Glenn Research Center,
Cleve, USA
LAMC-2016 General Co-Chair



LAMC-2016 Technical Program Committee Chair's Message



Dear Authors and Participants:

It has been a great pleasure and honor to serve as Technical Program Committee (TPC) Chairs for this first IEEE MTT-S Latin American Microwave Conference, which no doubt plows the way for the development of scientific activities in the field all across the region.

We are thankful of having authors from places outside Latin America, since it also opens the doors for high-level collaboration and networking worldwide, establishing win-win situations for all involved.

For this edition, we had the submission of 78 papers, all of which were read and thoroughly evaluated by at least three experts in each particular topic. Of these, 60 were accepted for presentation in the conference, including 13 invited papers presented in Special Sessions. Furthermore, authors of accepted and presented papers will be invited to submit an extended version to their work to be refereed with the aim of publishing it in a next Mini Special Issue of the IEEE Transactions on Microwave Theory and Techniques. These articles will showcase the advancement of microwaves and RF engineering in the region, and will boost the importance of state-of-the-art developments.

Our heartfelt thanks go to all the members of the Technical Program Reviewers' Committee, who dedicated many hours to insure the quality of the papers herein presented. We also thank all the organizing committee, first for having given us the opportunity to collaborate in this very important event, and then for having worked seamlessly to make all aspects of the conference flow in a precise and controlled manner.

With our best wishes that you truly enjoy the conference and Puerto Vallarta,



Roberto S. Murphy
INAOE,
Puebla, Mexico
LAMC-2016 TPC Chair



Vicente E. Boria
Technical University of Valencia,
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General Schedule



SUNDAY, DECEMBER 11

TIME	SESSION ID	ROOM	DESCRIPTION
15:00–20:00		<i>Ceiba / Jacaranda</i>	Conference registration

MONDAY, DECEMBER 12

TIME	SESSION ID	ROOM	DESCRIPTION
07:00–10:00		<i>Ceiba / Jacaranda</i>	Conference registration
08:00–09:00	<i>Mo-1</i>	<i>Violeta / Tulipan</i>	Inaugural Session & Keynote Speech: Dr. Ke Wu, Millimeter-wave Identification, Sensing and Tracking (MIST) Systems for Future Internet of Things and Smart Environment
09:00–09:15		<i>Violeta / Tulipan</i>	Gold sponsor plenary talk
09:15–10:35	<i>Mo-2</i>	<i>Violeta / Tulipan</i>	Special Session SS-1 (80 min): Signal Integrity and Power Integrity Challenges for Internet Infrastructure Physical Layer
10:35–11:15	<i>Mo-3P</i>	<i>Expo</i>	Poster Session & Coffee Break
11:15–12:55	<i>Mo-4A</i>	<i>Violeta / Tulipan</i>	Regular Session RS-1 (100 min): Optimization and Surrogate Modeling
11:15–12:55	<i>Mo-4B</i>	<i>Girasol</i>	Regular Session RS-2 (100 min): Wireless Communications and Applications
12:55–13:55		<i>Las Gaviotas Restaurant</i>	Lunch
13:55–14:45	<i>Mo-5</i>	<i>Violeta / Tulipan</i>	Keynote Speech: Dr. James C. Rautio, Æthereal Waves Make History - The four scientists who saved James Clerk Maxwell's theories
14:45–16:05	<i>Mo-6</i>	<i>Violeta / Tulipan</i>	Special Session SS-2 (80 min): High Speed and High Power Technologies for Modern Data Centers
16:05–16:45	<i>Mo-7P</i>	<i>Expo</i>	Poster Session & Coffee Break
16:45–18:05	<i>Mo-8A</i>	<i>Violeta / Tulipan</i>	Regular Session RS-3 (80 min): Sensors and Power Delivery Methods
16:45–18:05	<i>Mo-8B</i>	<i>Girasol</i>	Regular Session RS-4 (80 min): Power Amplifiers
18:05–18:30		-	Recess
18:30–21:00	<i>Mo-Soc</i>	<i>Jardin Carreta</i>	Welcome Reception



TUESDAY, DECEMBER 13

TIME	SESSION ID	ROOM	DESCRIPTION
07:00-09:00		<i>Ceiba / Jacaranda</i>	Conference registration
08:00-08:50	<i>Tu-1</i>	<i>Violeta / Tulipan</i>	Keynote Speech: Dr. Minoru Fujishima, Near-Fiber-Optic-Speed Wireless Communication with Terahertz CMOS Technology
08:50-10:30	<i>Tu-2</i>	<i>Violeta / Tulipan</i>	Special Session SS-3 (100 min): Microwave Research and Technology Activities in Spain (Part I)
10:30-11:10	<i>Tu-3P</i>	<i>Expo</i>	Poster Session & Coffee Break
11:10-12:50	<i>Tu-4A</i>	<i>Violeta / Tulipan</i>	Regular Session RS-5 (100 min): RF Integrated Circuits
11:10-12:50	<i>Tu-4B</i>	<i>Girasol</i>	Regular Session RS-6 (100 min): Tunable Devices
12:50-13:50		<i>Las Gaviotas Restaurant</i>	Lunch
13:50-15:30	<i>Tu-5</i>	<i>Violeta / Tulipan</i>	Special Session SS-4 (100 min): Preparing and Presenting Papers for MTT-S Journals and Conferences
15:30-16:10	<i>Tu-6P</i>	<i>Expo</i>	Poster Session & Coffee Break
16:10-16:45		-	Recess
16:45-23:45	<i>Tu-Soc</i>	<i>Lobby (16:45)</i>	Gala Dinner at Las Caletas

WEDNESDAY, DECEMBER 14

TIME	SESSION ID	ROOM	DESCRIPTION
07:00-09:00		<i>Ceiba / Jacaranda</i>	Conference registration
08:00-08:50	<i>We-1</i>	<i>Violeta / Tulipan</i>	Keynote Speech: Dr. Steve C. Reising, Improved Remote Sensing of Hurricanes and Tropical Systems using CubeSat Constellations of Millimeter-wave to THz Systems for Repeat-Pass Radiometry
08:50-10:50	<i>We-2</i>	<i>Violeta / Tulipan</i>	Special Session SS-5 (120 min): Enabling Information and Communications Technologies (ICT) for Humanitarian Aid (IEEE SIGHT/HAC Session)
10:50-11:20		<i>Foyer</i>	Coffee Break
11:20-12:40	<i>We-3A</i>	<i>Violeta / Tulipan</i>	Regular Session RS-7 (80 min): Passive Components and Antennas
11:20-12:40	<i>We-3B</i>	<i>Girasol</i>	Regular Session RS-8 (80 min): Microwave Systems and Applications
12:40-13:40		<i>Las Gaviotas Restaurant</i>	Lunch
13:40-15:30	<i>We-4</i>	<i>Violeta / Tulipan</i>	Special Session SS-6 (110 min): RF Applications of 3D Additive Manufacturing: Materials, Processes and Opportunities
15:30-16:00		<i>Foyer</i>	Coffee Break
16:00-17:30	<i>We-5</i>	<i>Violeta / Tulipan</i>	Special Session SS-7 (90 min): Microwave Research and Technology Activities in Spain (Part II)
17:30-17:40	<i>We-6</i>	<i>Violeta / Tulipan</i>	Closing Remarks
17:40-19:30	<i>We-Soc</i>	<i>Jardin Carreta</i>	Tequila Tasting

Keynote Speaker

Session ID: Mo-1 / Monday, December 12

Millimeter-wave Identification, Sensing and Tracking (MIST) Systems for Future Internet of Things and Smart Environment



Ke Wu, FIEEE, FCAE, FRSC

2016 President of IEEE Microwave Theory and Techniques Society (MTT-S)
Poly-Grames Research Center
Department of Electrical Engineering
Center for Radiofrequency Electronics Research (CREER) of Quebec
Ecole Polytechnique (University of Montreal), Canada

Abstract

Emerging millimeter-wave Identification, Sensing and Tracking (MIST) technology is set out to exploit the smaller structure size and the larger available bandwidths in order to alleviate the limitations of low-frequency RFID. The successful development of MIST into markets is strategically critical for future smart living and better life in terms of green environment, efficient energy and secure information. In this work, the state-of-art of innovative techniques, which allow propelling the MIST technology in the front line of future innovative wireless systems will be presented. Two recent developments in our group will be highlighted with hardware demonstrations. Interestingly, the MIST concept is fully compatible with upcoming and future wireless requirements and architectures such as 5G technologies. The great potentials and exciting prospects of MIST systems as well as their technological challenges will be discussed.

Biography

Dr. Ke Wu is Professor of electrical engineering, and Canada Research Chair in RF and millimeter-wave engineering at the Ecole Polytechnique (University of Montreal). He is also the NSERC-Huawei Industrial Research Chair in Future Wireless Technologies (the first Huawei-endowed Chair in the world). He has been the Director of the Poly-Grames Research Center and the Founding Director (2008-2014) of the Center for Radiofrequency Electronics Research of Quebec. He held/holds visiting/honorary professorships at various universities in the world. He has authored/co-authored over 1100 referred papers, and a number of books/book chapters and more than 40 patents. Dr. Wu was the general chair of the 2012 IEEE MTT-S International Microwave Symposium. He is the 2016 President of the IEEE Microwave Theory and Techniques Society (MTT-S). He also serves as the inaugural North-American representative in the General Assembly of the European Microwave Association (EuMA). He was the recipient of many awards and prizes including the inaugural IEEE MTT-S Outstanding Young Engineer Award, the 2004 Fessenden Medal of the IEEE Canada, the 2009 Thomas W. Eadie Medal from the Royal Society of Canada (The Academies of Arts, Humanities and Sciences of Canada), the Queen Elizabeth II Diamond Jubilee Medal, the 2013 Award of Merit of Federation of Chinese Canadian Professionals, the 2014 IEEE MTT-S Microwave Application Award, the 2014 Marie-Victorin Prize (Prix du Québec - the highest distinction of Québec in the Natural Sciences and Engineering), the 2015 Prix d'Excellence en Recherche et Innovation of Polytechnique Montréal and the 2015 IEEE Montreal Section Gold Medal of Achievement. He is a Fellow of the IEEE, a Fellow of the Canadian Academy of Engineering (CAE) and a Fellow of the Royal Society of Canada. He was an IEEE MTT-S Distinguished Microwave Lecturer from Jan. 2009 to Dec. 2011.

Keynote Speaker

Session ID: Mo-5 / Monday, December 12

*Ethereal Waves Make History
The four scientists who saved James Clerk
Maxwell's theories*



James C. Rautio

President & CEO of Sonnet Software

Abstract

Maxwell first published what came to be called “Maxwell’s equations” in 1865. However, it was not until 1888, and Heinrich Hertz’s experimental validation that Maxwell’s equations were widely accepted as correct. The story of the intervening 23 years is little known. Maxwell, who died in 1879, was exceptionally modest and did not promote his own results at any time. The survival of Maxwell’s equations was up to the only three researchers in the entire world who paid serious attention to Maxwell’s paper in 1865, and his seminal Treatise in 1873: Oliver Heaviside, Oliver Lodge, and George Francis FitzGerald. Later, Hertz joined the group forming “The Four Maxwellians”. This presentation describes the torturous 23-year path Maxwell’s equations took from their creation to their initial acceptance. No mathematical knowledge is needed; this presentation is ideal for a general audience.

Biography

James C. Rautio (S’77–M’78–SM’91–F’00) received the B.S.E.E. degree from Cornell University, Ithaca, NY, in 1978, the M.S. degree in systems engineering from the University of Pennsylvania, Philadelphia, in 1982, and the Ph.D. degree in electrical engineering from Syracuse University, Syracuse, NY, in 1986.

From 1978 to 1986, he was with General Electric, initially with the Valley Forge Space Division, then with the Syracuse Electronics Laboratory. During this time, he developed microwave design and measurement software and designed microwave circuits on alumina and on GaAs. From 1986 to 1988, he was a Visiting Professor with Syracuse University and Cornell University. In 1988, he joined Sonnet Software, Liverpool, NY, full time, a company he had founded in 1983. In 1995, Sonnet Software was listed on the Inc. 500 list of the fastest growing privately held U.S. companies, the first microwave software company ever to be so listed. Today, Sonnet Software is the leading vendor of high accuracy three-dimensional planar high-frequency electromagnetic analysis software.

Dr. Rautio was the recipient of the 2001 IEEE Microwave Theory and Techniques Society (IEEE MTT-S) Microwave Application Award and the 2014 IEEE MTT Distinguished Service Award. He was appointed MTT Distinguished Microwave Lecturer for 2005 – 2007 lecturing on the life of James Clerk Maxwell. His efforts have also resulted in the preservation and restoration of Glenlair, Maxwell’s home.

Keynote Speaker

Session ID: Tu-1 / Tuesday, December 13

Near-Fiber-Optic-Speed Wireless Communication with Terahertz CMOS Technology



Minoru Fujishima

Graduate School of Advanced Sciences of
Matter Hiroshima University, Japan

Abstract

Unallocated frequency band above 275GHz has been recently focused on for wireless communication in future generation. Since vast frequency range in 300GHz band is available, near-fiber-optic speed over 100Gbps will be possible even in wireless communication. Here, to target at real commercial products, a transceiver with all CMOS technology is promising since digital signal processing including baseband modulation must be with CMOS integrated circuits. However, high-frequency characteristics of silicon MOSFETs used in the CMOS technology are generally inferior to those of advanced InP devices. Therefore, to realize with RF frontends with CMOS process, the circuits must operate at near or beyond transistor's f_{max} (unity-power-gain frequency). Recently, a 300GHz CMOS transmitter capable of quadrature-amplitude-modulation (QAM) has been demonstrated. In this presentation, terahertz frontend technologies

with CMOS process are explained. Then, performance comparison of 300GHz transceivers with miscellaneous technologies is clarified. With consideration of technical constraints, possible frequency allocation in unallocated 300GHz band is discussed. Finally, future promising application for terahertz wireless communication is introduced.

Biography

Minoru Fujishima received the B.E., M.E. and Ph.D degrees in Electronics Engineering from the University of Tokyo, Japan in 1988, 1990 and 1993, respectively. He joined faculty of the University of Tokyo in 1988 as a research associate, and was an associate professor of the School of Frontier Sciences, University of Tokyo since 1999. He was a visiting professor at the ESAT-MICAS laboratory, Katholieke, Universiteit Leuven, Belgium, from 1998 to 2000. Since 2009, he has been a professor of the Graduate School of Advanced Sciences of Matter, Hiroshima University.

He studied design and modeling of CMOS and BiCMOS circuits, nonlinear circuits, single-electron circuits, and quantum-computing circuits. His current research interests are in the designs of low-power millimeter- and short-millimeter-wave wireless CMOS circuits. He coauthored more than 50 journal papers and 120 conference papers. He served as a distinguished lecturer in IEEE solid-state circuits society from 2011 to 2012.

Keynote Speaker

Session ID: We-1 / Wednesday, December 14

Improved Remote Sensing of Hurricanes and Tropical Systems using CubeSat Constellations of Millimeter-wave to THz Systems for Repeat-Pass Radiometry



Steven C. Reising

Microwave Systems Laboratory
Electrical and Computer Engineering
Dept. Colorado State University
Fort Collins, Colorado, USA

Abstract

Global observations of clouds and precipitation are essential to improve monitoring and prediction of severe storms with substantial impacts on human life and property. For example, severe storms, hurricanes and tropical cyclones have caused more than 722 Billion USD of damage from 1980-2016 in the U.S. alone. To understand processes in clouds that lead to severe storms with high winds and intense rainfall, global observations with rapid revisit times are essential. To this end, sensors on geostationary satellites have substantially improved weather prediction by providing visible and infrared measurements with 5- to 10-minute resolution. However, the development and deployment of low-cost small satellite constellations of millimeter-wave to THz systems are needed to improve understanding of cloud and ice processes leading to the onset of precipitation on a global basis. At the same time, in just the past 3-4 years, the satellite industry has experienced the rapid maturation of disruptive technology, including standardized components and processes to reliably manufacture and launch CubeSats capable of scientific

measurements. The rapid development cycles of CubeSats of 2-3 years from initiation to launch afford opportunities for much faster adoption of new technology. CubeSats typically benefit from low-cost launches as secondary payloads on missions of opportunity. In particular, 6U CubeSats provide sufficient resources in terms of mass, power, satellite-to-ground communications and antenna aperture size.

Millimeter-wave to THz systems from approximately 90-900 GHz are capable of observing clouds and precipitation on a global basis. A constellation of 5 identical 6U CubeSats measuring at 5 millimeter-wave frequencies with 5-minute temporal sampling can observe time-resolved cloud processes and their transition to precipitation. At present, a collaborative partnership among Colorado State University (lead institution), NASA/Caltech Jet Propulsion Laboratory and Blue Canyon Technologies is forging a new 6U CubeSat demonstration mission for a future constellation for remote sensing of precipitation entitled Temporal Experiment for Storms and Tropical Systems (TEMPEST). TEMPEST-D is planned for delivery during summer 2017 for a NASA-provided launch to the International Space Station and deployment into orbit via Nanoracks in the spring of 2018.

Biography

Steven C. Reising has been Full Professor in Electrical and Computer Engineering at Colorado State University (CSU) since 2011, where he served as Associate Professor from 2004 to 2011. Previously, he was Assistant Professor at the University of Massachusetts Amherst from 1998 to 2004 and received tenure. Dr. Reising received the Ph.D. degree in electrical engineering from Stanford University in 1998, where he was supported by a NASA Earth Systems Science Fellowship. Dr. Reising's research interests span a broad range of disciplines, including remote sensing of the Earth's atmosphere and oceans from airborne platforms and U-Class satellites, passive remote sensing systems and the design and application of low-noise MMICs from millimeter-wave to terahertz frequencies. He has been Principal Investigator of 14 grants over the past 15 years from sponsors including NASA, National Science Foundation (NSF), Department of Defense, Office of Naval Research, Naval Research Laboratory, Ball Aerospace & Technologies Corp., and the European Space Agency. Dr. Reising recently received the 2015 George T. Abell Outstanding Research Faculty Award from the College of Engineering at CSU.

Monday, December 12

SS-1: Signal Integrity and Power Integrity Challenges for Internet Infrastructure Physical Layer (Mo-2)

Organizers:

Mike Resso and Heidi Barnes
(Keysight Technologies)

Abstract:

Today's internet infrastructure demands the highest level of signal integrity as well as power integrity within the physical layer. Backplanes, line cards, cables and subsystems must transmit error free data at serial rates of 56 Gigabits per second and higher over copper. This design challenge must be met with measurement and simulation tools that can provide correlation of data between time domain, frequency domain, and eye diagrams. This special session will include worldwide expertise in these engineering disciplines as well as academia to provide useful information for high speed digital designers.

ID	PAPER#	TITLE / AUTHORS / AFFILIATIONS
Mo-2-1	-	PAM-4 Channel Equalization Tips and Techniques Heidi Barnes <i>Keysight Technologies, Santa Rosa, CA, USA</i>
Mo-2-2	187	A New Method to Verify the Accuracy of De-Embedding Algorithms Mike Resso ¹ , Eric Bogatin ^{2,3} , Aayushi Vatsyayan ³ ¹ <i>Keysight Technologies, Santa Rosa, CA, USA</i> , ² <i>Teledyne LeCroy, USA</i> , ³ <i>University of Colorado, Boulder, USA</i>
Mo-2-3	-	Frequency-Dependent Current Distribution of Edge-Coupled Interconnects: How it modifies the electrical characteristics of differential links Diego M. Cortes-Hernandez <i>Intel Guadalajara Design Center, Mexico</i>
Mo-2-4	169	Extending the Usable Range of the 2-Port Shunt Thru Impedance Measurement Steven M. Sandler <i>Picotest, Phoenix, AZ, USA</i>

Monday, December 12

SS-2: High Speed and High Power Technologies for Modern Data Centers (Mo-6)

Organizers:

Jiangqi He and Jayashree Kar
(Intel Corporation)

Abstract:

Modern datacenters require cutting edge technologies to meet their performance and complexity. Among many other challenges, such as software stack, business model, operational management and others, high speed signaling and high power technologies remain the key roles for building modern datacenters. Those challenges not only include new materials and innovative designs architectures, but also require new tools and methodologies. This special section will cover some of the research and development topics that are directly linked with high performance datacenter solutions associated with microwave and electromagnetic technology developments.

ID	PAPER#	TITLE / AUTHORS / AFFILIATIONS
Mo-6-1	-	Signal Integrity Challenges for Data Center Howard Heck <i>Intel Corporation, Hillsboro, OR, USA</i>
Mo-6-2	-	High Density Integrated Voltage Regulator Solution for Data Center Qiang Li <i>Virginia Tech, Blacksburg, VA, USA</i>
Mo-6-3	-	CAD Challenges for Multi-physics An-Yu Kuo <i>Cadence, San Jose, CA, USA</i>
Mo-6-4	-	System Level Optimization of Power Delivery Networks Felipe Leal-Romo <i>Intel Guadalajara Design Center, Mexico and ITESO – The Jesuit University of Guadalajara, Mexico</i>

Tuesday, December 13

SS-3: Microwave Research and Technology Activities in Spain, Part I (Tu-2)

Organizers:

Vicente E. Boria-Esbert
(*Technical University of Valencia*)
and Miguel A. Gómez-Laso
(*Public University of Navarre*)

Abstract:

This special session is aimed at highlighting the main research lines, as well as the most relevant scientific and technological achievements, in the areas of RF circuits, microwave components and antennas that are being developed in Spain. For this purpose, several descriptive and technical presentations about recent activities performed by several Spanish research groups (from different R&D institutions and Universities) will be shown, covering the areas of analysis and design of active and passive components including various technological realizations.

ID	PAPER#	TITLE / AUTHORS / AFFILIATIONS
Tu-2-1	119	Computer-Aided Design (CAD) of Filters and Multiplexers for Passive Inter-Modulation (PIM) Set-ups P. Soto ¹ , D. Smacchia ² , C. Carceller ¹ , V. E. Boria ^{1,2} , M. Guglielmi ¹ ¹ Technical University of Valencia, Valencia, Spain, ² Val Space Consortium, Valencia, Spain
Tu-2-2	121	Microwave periodic structures and synthesized structures with smooth profiles and their applications I. Arnedo, I. Arregui, F. Teberio, M. Chudzik, A. Lujambio, D. Benito, J. Percaz, A. Gomez-Torrent, T. Lopetegi, M. A. Laso <i>Public University of Navarre, Pamplona, Spain</i>
Tu-2-3	125	Recent Advances in the Design of Compact Microwave Components Based on Reactively-Loaded Transmission Lines J. Selga, P. Vélez, M. Orellana, J. Bonache, F. Martin <i>Universtitat Autònoma de Barcelona, Bellaterra, Spain</i>
Tu-2-4	127	Analytical and highly efficient numerical modeling of electromagnetic periodic structures F. Medina, F. Mesa, R. Rodriguez-Berral, R. R. Boix <i>University of Seville, Seville, Spain</i>
Tu-2-5	133	The Radiofrequency, Electromagnetics, Microwaves and Antennas Research Group (GREMA) D. Segovia Vargas, M. Salazar Palma, J. Herraziz Martinez, L. García Muñoz, L. García Castillo, A. Rivera, K. Abdalmalak, G. Santamaría, F. Albarracin Vargas, A. García Lampérez, S. Llorente Romano <i>Carlos III University, Leganés, Spain</i>

SPECIAL SESSIONS

Tuesday, December 13

SS-4: Preparing and Presenting Papers for MTT-S Journals and Conferences (Tu-5)

ID	TITLE / AUTHORS / AFFILIATIONS
Tu-5-1	<p style="text-align: center;">How to Write a Paper for IEEE Journals and Navigate the Review Process</p> <p style="text-align: center;">George E. Ponchak <i>NASA Glenn Research Center, Cleveland, USA</i></p> <p>Abstract: The careers of many people depends on their success in writing and getting their papers published. More important, the scientific process requires that scientific findings be published so that other researchers may build on your ideas or refute your findings. If authors are not able to publish their papers, then their careers are hurt and scientific progress slows and stops. Therefore, it is critical that researchers and engineers understand the process of writing and getting published their papers in reputable and cited journals and scientific conferences. However, often, authors' papers are rejected because they did not understand what reviewers, Associate Editors, and Editors are looking for in a paper, even if the technical results are good. This presentation will cover the steps that an author should take to increase the acceptance rate of their papers in journals and conference. It will cover the reasons most papers are rejected and how an author should organize their paper to avoid those reasons. Lastly, it will present what steps you should take if your paper is rejected to get it published in the same journal or in a different journal.</p>
Tu-5-2	<p style="text-align: center;">You, Your Slides, and Your Posters: Allies or Foes?</p> <p style="text-align: center;">John W. Bandler <i>McMaster University and Bandler Corporation</i></p> <p>Abstract: In the first few blinks of an eye after you stumble onto the stage, or make an opening stab at your slides or poster, most of your audience has likely made up its mind. The rest of your performance serves as confirmation of your audience's bias and impressions. And besides you, your slides and posters have their own agenda that reflects you, your expertise, your authenticity, and much more. As a writer and director of plays as well as a professor and entrepreneur—with experience in operating exhibition booths—I elaborate on effective presentations: understanding and embracing your audience's needs; gaining trust; the importance of clarity, citation and acknowledgement; those crucial first few seconds and your first few slides; your slides and you: an exercise in psychology and art; and how to identify and avoid potential traps and pitfalls.</p>

Wednesday, December 14

SS-5: (IEEE SIGHT/HAC Session)
Enabling Information and Communications Technologies (ICT)
for Humanitarian Aid (We-2)

Organizers:

Tushar Sharma

(iRadio Lab, University of Calgary)

and José E. Rayas-Sánchez

(ITESO – The Jesuit University of Guadalajara)

Abstract:

Technology is enabling people increasingly being at the heart of humanitarian aid. Although the number of natural disasters and human conflicts continues to rise worldwide, access to communication technologies is increasing significantly faster. To build resilience and improve survivability in humanitarian crisis, the ongoing technological revolution may provide our greatest hope and opportunity. The IEEE Microwave Theory and Techniques Society (MTTS) and Antennas and Propagation Society (APS) recognize the roles they have outside their professional lives. In particular, MTTS/APS Special Interest Group in Humanitarian Technology (SIGHT) focuses on motivating high school students, young engineers, and professionals to apply low-cost innovative RF technologies for disaster readiness and humanitarian needs. To align with the IEEE Humanitarian Activities Committee (HAC) vision, in this special session we introduce several humanitarian initiatives involving wireless RF technologies with impactful local changes. Given the social and economic configuration of Latin America, this region offers a great opportunity for SIGHT/HAC projects, particularly those involving RF and microwave technologies, with a very high potential for significant positive impact, including areas such as disaster management, health care, low-cost wireless solutions, internet of space, emergency ad-hoc networks, agriculture, food, energy, security, etc.



LAMC - Enabling Information and Communications Technologies (ICT) for Humanitarian Aid



Alessandra Costanzo
Professor
University of Bologna
Italy



Dr Eric Mokole
Naval Research Laboratory
USA



Dr Ibrahim Khalil
Senior Engineer
NXP Semiconductors
USA



Dr James Rautio
Founder
Sonnet Software
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Dr Steven Reising
Professor
Colorado State University
USA



Janio L Jadan
Researcher
University of Costa Rica
Costa Rica



Mario Aleman
IEEE SIGHT
Nicaragua



Marvin Arias
Professor
UNI
Nicaragua



Wednesday, 14 Dec 2016



Puerto Vallarta, Sheraton Bugarvilias Resort & Convention Center

Young Professionals In Microwaves

SPECIAL SESSIONS

SS-5 (cont.)

ID	PAPER#	TITLE / AUTHORS / AFFILIATIONS
We-2-1	-	Opening Remarks and Introduction to MTTS APS SIGHT Eric Mokole <i>IEEE Antennas and Propagation Society</i>
We-2-2	142	An Agile and Accurate Microwave System for Tracking Elderly People Occupancy at Home G. Paolini, M. Del Prete, F. Berra, D. Masotti, A. Costanzo <i>University of Bologna, Bologna, Italy</i>
We-2-3	-	ICT Solutions for Agricultural Challenges in the Caribbean of Nicaragua Mario Alemán ¹ and Marvin R. Arias ² ¹ <i>IEEE Humanitarian Activities Committee (HAC),</i> ² <i>National University of Engineering, Managua, Nicaragua</i>
We-2-4	183	Improving the interaction of Down syndrome students through the use of RFID technology J. L. Jadán-Guerrero ¹ , L. A. Guerrero ² , T. Sharma ³ ¹ <i>Universidad Tecnológica Indoamérica, Quito, Ecuador,</i> ² <i>Universidad de Costa Rica, San Pedro de Montesdeoca, Costa Rica,</i> ³ <i>University of Calgary, Calgary, Canada</i>
We-2-5	-	Launching a Successful Career by Starting with Amateur Radio James C. Rautio <i>President & CEO of Sonnet Software</i>
We-2-6	-	Wireless infrastructure for connecting the last billion Ibrahim Khalil <i>NXP Semiconductors, Phoenix, AZ, USA</i>



Wednesday, December 14

SS-6: RF Applications of 3D Additive Manufacturing: Materials, Processes and Opportunities (We-4)

Organizers:

Thomas M. Weller and
Eduardo A. Rojas-Nastrucci
(University of South Florida)

Abstract:

Digital additive manufacturing (AM) is being increasingly studied for its potential applications at microwave and mm-wave frequencies. Several different AM techniques are available and each offers its own advantages and challenges. The presentations in this session will cover issues that span the development of novel microwave materials that are compatible with AM; AM techniques that include fused deposition modeling, micro-dispensing, polymer-jetting and aerosol spraying; and how AM is being successfully applied to manufacture new and high performance microwave circuits and antennas. Our intent is to provide a working level of understanding for those new to AM while also covering finer details and challenges for those with experience in the area.

ID	PAPER#	TITLE / AUTHORS / AFFILIATIONS
We-4-1	-	Additive Manufacturing of Microwave Electronics based on Functional Nanocomposites Materials Jing Wang <i>University of South Florida, USA</i>
We-4-2	-	3D Printed Microwave and THz Devices using Polymer-Jetting Technique Hao Xin <i>University of Arizona, USA</i>
We-4-3	-	Microwave and Mm-Wave Applications of 3D Multi-Material Digital Printing for Antennas and Circuit Components Thomas Weller <i>University of South Florida, USA</i>
We-4-4	185	Metallic 3D Printed Ka-Band Pyramidal Horn using Binder Jetting E. A. Rojas-Nastrucci, J. Nussbaum, T. M. Weller, N. B. Crane <i>University of South Florida, Tampa, USA</i>

Organizers:

Vicente E. Borja-Esbert
(Technical University of Valencia)
and Miguel A. Gómez-Laso
(Public University of Navarre)

Wednesday, December 14

SS-7: Microwave Research and Technology Activities in Spain (Part II) (We-5)

Abstract:

This special session gives continuity to SS-3 by highlighting research lines developed in Spain on RF circuits, microwave components and antennas. By means of a panel discussion, it is expected that this second part will open a discussion forum, and become a meeting point, in order to promote future collaborations between Spanish microwave R&D groups and the related international community (with special focus in the Latin America region, where microwave technologies are being pushed both at industries and academic organizations in recent years). Information about the 2018 European Microwave Week (EuMW) event to be held next September 2018 in Madrid (Spain) and about the European Microwave Association (EuMA) -that promotes microwaves in Europe and coordinates the organization of EuMW events- will be also provided in order to promote the active participation of the Latin America microwave community, and reinforce their collaborative links with European partners.

ID	PAPER#	TITLE / AUTHORS / AFFILIATIONS
We-5-1	118	Characterization Techniques for Stability and Noise in Microwave Amplifiers under Large-Signal Excitations J. Collantes, J. Portilla, A. Anakabe, N. Otegi <i>University of the Basque Country (UPV/EHU), Leioa, Spain</i>
We-5-2	141	Advances in the simulation of autonomous microwave circuits A. Suarez, S. Sancho, M. Ponton, F. Ramirez <i>University of Cantabria, Santander, Spain</i>
We-5-3	128	New Antenna Topologies for 5G Communication Systems J. Fernández González, A. Tamayo Dominguez, M. Sierra Pérez, B. Galocha Iragüen, R. Martínez Rodríguez-Osorio, M. Sierra Castañer <i>Universidad Politécnica de Madrid, Madrid, Spain</i>
We-5-4	-	Panel Discussion about Future Microwave Activities and Collaborations with Spanish Speaking Countries (moderated by Miguel A. Gómez-Laso ¹) Almudena Suarez ² , Francisco Medina ³ , Vicente E. Borja ⁴ , Roberto S. Murphy ⁵ , and José E. Rayas-Sánchez ⁶ ¹ Public University of Navarre, Spain, ² University of Cantabria, Santander, Spain, ³ University of Seville, Spain, ⁴ Technical University of Valencia, Valencia, Spain, ⁵ INAOE, Puebla Mexico, ⁶ ITESO - The Jesuit University of Guadalajara, Mexico

Monday, December 12

RS-1: Optimization and Surrogate Modeling (Mo-4A)

ID	PAPER#	TITLE / AUTHORS / AFFILIATIONS
Mo-4A-1	122	<p>Eye Diagram Optimization based on Design of Experiments (DoE) to Accelerate Industrial Testing of High Speed Links</p> <p>A. Viveros-Wacher^{1,2}, J. E. Rayas-Sanchez¹</p> <p>¹ITESO – The Jesuit University of Guadalajara, Tlaquepaque, Mexico ²Intel Corp., Zapopan, Mexico</p>
Mo-4A-2	144	<p>A Holistic Methodology for System Margining and Jitter Tolerance Optimization in Post-Silicon Validation</p> <p>F. E. Rangel-Patiño^{2,1}, A. Viveros-Wacher^{2,1}, J. E. Rayas-Sánchez¹, E. A. Vega-Ochoa², I. Duron-Rosales², N. Hakim³</p> <p>¹ITESO, Tlaquepaque, Mexico, ²Intel, Zapopan, Mexico, ³Intel, Santa Clara, United States</p>
Mo-4A-3	160	<p>Multiphysics Polynomial-Based Surrogate Modeling of Microwave Structures in Frequency Domain</p> <p>J. L. Chavez-Hurtado, J. E. Rayas-Sanchez, Z. Brito-Brito</p> <p>ITESO - The Jesuit University of Guadalajara, Tlaquepaque, Mexico</p>
Mo-4A-4	152	<p>Recent Advances in EM Modeling and Optimization Exploiting Parallel Computations</p> <p>V. Gongal Reddy¹, C. Zhang¹, F. Feng^{2,1}, Q. Zhang¹</p> <p>¹Carleton University, Ottawa, Canada, ²Tianjin University, Nankai, China</p>
Mo-4A-5	156	<p>An Overview of Neuro-Space Mapping Techniques for Microwave Device Modeling</p> <p>W. Liu¹, L. Zhu³, W. Na^{1,2}, Q. Zhang^{2,1}</p> <p>¹Tianjin University, Tianjin, China, ²Carleton University, Ottawa, Canada, ³Tianjin Chengjian University, Tianjin, Canada</p>

Monday, December 12

RS-2: Wireless Communications and Applications (Mo-4B)

ID	PAPER#	TITLE / AUTHORS / AFFILIATIONS
Mo-4B-1	124	<p>Frequency and Angular Estimations of Detected Microwave Source using Unmanned Aerial Vehicles</p> <p>I. Llamas-Garro¹, K. Lukin², M. T. de Melo⁴, J. Kim⁵</p> <p>¹Centre Tecnològic de Telecomunicacions de Catalunya (CTTC), Castelldefels, Spain, ²National Academy of Sciences of Ukraine (NASU), Kharkov, Ukraine, ³Chonbuk National University (CBNU), Jeonju, Republic of Korea, ⁴Universidade Federal de Pernambuco (UFPE), Recife, Brazil</p>
Mo-4B-2	139	<p>A novel function segmentation methodology for implementing affordable channel emulators</p> <p>J. M. Trejo-Arellano¹, J. Vazquez-Castillo², O. Longoria-Gandara¹, C. Gutierrez³, R. Carrasco-Alvarez⁴, A. Castillo-Atoche⁵</p> <p>¹ITESO – The Jesuit University of Guadalajara, Tlaquepaque, Mexico, ²Universidad de Quintana Roo, Chetumal, Mexico, ³UASLP, San Luis Potosi, Mexico, ⁴UDG, Guadalajara, Mexico, ⁵Universidad Autonoma de Yucatan, Merida, Mexico</p>
Mo-4B-3	171	<p>The Packet Arrival Model and Separation Algorithm for an MPR-Aware 802.11 DCF MAC Protocol</p> <p>L. J. Medina-Marin¹, A. G. Orozco-Lugo², M. Lara², F. Téllez-A.², R. Parra-Michel¹</p> <p>¹Cinvestav, Guadalajara, Mexico, ²Cinvestav, Ciudad de México, Mexico</p>
Mo-4B-4	172	<p>Multiple Packet Reception Exploiting Blank Intervals</p> <p>F. Téllez-A., A. G. Orozco-Lugo, M. Lara / Cinvestav, Ciudad de México, Mexico</p>
Mo-4B-5	179	<p>Performance Evaluation of an OFDMA and CDMA overlaid system</p> <p>O. Guerrero-Méndez, J. Castañeda-Camacho, L. Cortez, G. Mino-Aguilar, J. F. Guerrero-Castellanos, G. A. Muñoz-Hernández, M. Gutierrez-Arias</p> <p>Benemérita Universidad Autónoma de Puebla, Puebla, Mexico</p>

Monday, December 12

RS-3: Sensors and Power Delivery Methods (Mo-8A)

ID	PAPER#	TITLE / AUTHORS / AFFILIATIONS
Mo-8A-1	138	Modeling Linear VR for DDR4 Termination Scheme of ADDR/CMD/CTRL Signals R. Astro Bohorquez, C. J. Franco Tinoco <i>INTEL Tecnologia de Mexico S.A de C.V, Zapopan, Mexico</i>
Mo-8A-2	150	Filter design methodology for low noise power domains in data center platforms D. M. Garcia Mora, D. Garcia Garcia, F. Yahyaei-Moayyed, J. C. Cinco Galicia, C. R. Sanchez Ortiz, C. A. Sala, <i>Intel Tecnologias De Mexico S.A de S.V., Zapopan, Mexico</i>
Mo-8A-3	149	A resolution scalable temperature sensor for wireless systems A. Brönnner, R. Kostack, J. Wagner, F. Ellinger <i>Technische Universität Dresden, Dresden, Germany</i>
Mo-8A-4	166	A Tx/Rx 3-20-GHz DP16T Switching Matrix for Breast Cancer Detection System A. Azhari ^{1,2} , K. Yuki ² , X. Xiao ³ , T. Kikkawa ² <i>¹Osaka University, Osaka, Japan, ²Hiroshima University, Hiroshima, Japan, ³Tianjin University, Tianjin, China</i>

Monday, December 12

RS-4: Power Amplifiers (Mo-8B)

ID	PAPER#	TITLE / AUTHORS / AFFILIATIONS
Mo-8B-1	112	Broadband Class-E Power Amplifier with High Cold Output Impedance Suitable for Load modulated Dual Branch Amplifiers T. Sharma, P. Aflaki, M. Helaoui, F. Ghannouchi <i>Iradio, Calgary, Canada</i>
Mo-8B-2	123	20 Gbit/s Ultra-Compact Optical Receiver Front-End with Variable Gain Transimpedance Amplifier in 80 nm CMOS L. Szilagyi, R. Henker, F. Ellinger <i>Technische Universität Dresden, Dresden, Germany</i>
Mo-8B-3	162	A Fully Integrated 2.6 GHz Cascode Class-E PA in 0.25 μm CMOS Employing New Bias Network for Stacked Transistors M. Kreißig, R. Kostack, J. Pliva, R. Paulo, F. Ellinger <i>Technische Universität Dresden, Dresden, Germany</i>
Mo-8B-4	178	Improved Envelope Load Pull System for High Power Characterization E. J. Malfavaun González ^{1,2} , M. A. Pulido Gaytán ^{1,2} , J. Urbina Martínez ^{2,1} , B. E. Figueroa Reséndiz ^{2,1} , J. R. Loo Yau ^{2,1} , M. Maya Sánchez ^{1,2} , J. A. Reynoso Hernández ^{1,2} ¹ Centro de Investigación Científica y de Educación Superior de Ensenada (CICESE), Ensenada, Mexico, ² Centro de Investigación y de Estudios Avanzados del I.P.N. Unidad Guadalajara (CINVESTAV-GDL), Zapopan, Mexico

Tuesday, December 13

RS-5: RF Integrated Circuits (Tu-4A)

ID	PAPER#	TITLE / AUTHORS / AFFILIATIONS
Tu-4A-1	114	90 Gbit/s 4-level Pulse-Amplitude-Modulation Vertical-Cavity Surface-Emitting Laser Driver Integrated Circuit in 130 nm SiGe Technology G. Belfiore, R. Henker, F. Ellinger <i>Technische Universität Dresden, Dresden, Germany</i>
Tu-4A-2	135	A Direct RF Sampling Receiver Using Continuous-Time Band-Pass Sigma-Delta ADC with Active Inductor in CMOS R. Kostack ^{1,2} , A. Naeini ¹ , H. Stockinger ¹ , A. Brönnner ² , F. Ellinger ² ¹ Intel Deutschland GmbH, Neubiberg, Germany, ² Technische Universität Dresden, Dresden, Germany
Tu-4A-3	136	Active CMOS Differential Filter with +3.5 dBm IP1dB and +12.3 dBm IIP3 A. Arbelaez ¹ , A. Corona ¹ , J. L. Olvera ¹ , C. Saavedra ² ¹ INAOE, San Andres Cholula, Mexico, ² Queen's University, Kingston, Canada
Tu-4A-4	155	A Tunable 70 MHz IF Filter with 70 ns Settling Time in 130 nm CMOS for Wake-up Radios M. Khafaji, C. Tzschoppe, G. Tretter, P. Testa, F. Ellinger <i>TU Dresden, Dresden, Germany</i>
Tu-4A-5	167	Design and Physical Implementation of an Analog Receiver for a 2.5 Gbps SerDes E. Conde Almada, E. Juarez Hernandez, E. Martinez-Guerrero <i>ITESO – The Jesuit University of Guadalajara, Tlaquepaque, Mexico</i>

Tuesday, December 13

RS-6: Tunable Devices (Tu-4B)

ID	PAPER#	TITLE / AUTHORS / AFFILIATIONS
Tu-4B-1	115	New Tunable Substrate Integrated Waveguide Bandstop Resonator M. Cariou ^{1,2} , S. Cadiou ¹ , B. Potelon ¹ , C. Quendo ¹ , R. Ségalen ² , F. Mahé ² ¹ Université de Brest, Brest, France, ² Thales Systèmes Aéroportés, Brest, France
Tu-4B-2	143	77 GHz Polarization Reconfigurable Micromachined Antenna for Automotive Radar Applications A. Jaiswal, S. Dey, M. P. Abegaonkar, S. K. Koul Indian Institute of technology, New Delhi, India
Tu-4B-3	146	EM wave propagation in a temporally modulated transmission line: Theory P. Halevi ¹ , J. Reyes Ayona ^{2,1} ¹ INAOE, Tonantzintla, Mexico, ² Universidad de Guanajuato, Salamanca, Mexico
Tu-4B-4	147	EM wave propagation in a temporally modulated transmission line: Experiment J. Reyes Ayona ^{2,1} , P. Halevi ¹ ¹ INAOE, Tonantzintla, Mexico, ² Universidad de Guanajuato, Salamanca, Mexico
Tu-4B-5	158	High Power Effects on a MEMS-based Tunable Matching Network for Power Amplifier Reconfigurability V. A. Silva Cortes, R. Weigel, G. Fischer, A. Hagelauer University of Erlangen-Nuremberg, Erlangen, Germany

Wednesday, December 14

RS-7: Passive Components and Antennas (We-3A)

ID	PAPER#	TITLE / AUTHORS / AFFILIATIONS
We-3A-1	134	Effects of parasitic reactance on lattice circuit slotline switch G. E. Ponchak NASA Glenn Research Center, Cleveland, United States
We-3A-2	168	Characterizing Printed Transmission Lines from Calculated Frequency-Dependent Resistance and Inductance and Experimental Propagation Constant D. M. Cortés Hernández ^{1,2} , J. Sánchez Mesa ² , B. Galvez Sahagun ² , R. Torres Torres ¹ ¹ INAOE, San Andres Cholula, Mexico, ² Intel GDC, Zapopan, Mexico
We-3A-3	180	Second Harmonic Suppression Band-Pass Filter Based on a Modified 2nd Order Microstrip Coupled Line J. L. Urbina-Martinez ¹ , B. Figueroa-Resendiz ¹ , J. R. Loo-Yau ¹ , P. Moreno ¹ , J. A. Reynoso-Hernández ² ¹ Centro de Investigación y Estudios Avanzados del I.P.N. Unidad Guadalajara, Zapopan, Mexico, ² Centro de Investigación Científica y de Educación Superior de Ensenada, Ensenada, Mexico
We-3A-4	182	A High-Speed Interconnect-Model in s-Domain C. H. Rodriguez ^{1,3} , J. L. Naredo ¹ , R. Parra ¹ , O. Longoria ² ¹ Cinvestav Guadalajara, Zapopan, Mexico, ² ITESO - The Jesuit University of Guadalajara, ³ Intel Guadalajara Design Center, Zapopan, Mexico

Wednesday, December 14

RS-8: Microwave Systems and Applications (We-3B)

ID	PAPER#	TITLE / AUTHORS / AFFILIATIONS
We-3B-1	110	Multi-Polarimetric SAR Adapted Virtual Beamforming-Based Techniques for Feature Enhanced Tomography of Forested Areas G. D. Martín del Campo Becerra, Y. Shkvarko, D. L. Torres Román <i>Cinvestav - IPN, Guadalajara, Mexico</i>
We-3B-2	126	Project FAST - Fast Actuators Sensors & Transceivers F. Ellinger ¹ , T. Meister ¹ , P. Grosa ¹ , K. Jamshidi ¹ , D. Ihle ¹ , N. Franchi ¹ , J. Wagner ¹ , A. Richter ¹ , G. Fettweis ¹ , F. H. Fitzek ¹ , M. Kreissig ¹ , H. Klessig ¹ , R. Kraemer ² , K. Richter ³ , A. Frotzschner ⁴ , R. Loehr ⁵ , W. Winkler ⁶ , D. Zoeke ⁷ , A. Carot ⁸ , A. Bluschke ⁹ ¹ TU Dresden, Dresden, Germany, ² IHP, Frankfurt (Oder), Germany, ³ Fraunhofer Institut IFF Magdeburg, Magdeburg, Germany, ⁴ Fraunhofer Institut IIS, Dresden, Germany, ⁵ Friedrich-Alexander Universität Erlangen-Nürnberg, Erlangen, Germany, ⁶ Silicon Radar, Frankfurt (Oder), Germany, ⁷ Siemens AG, München, Germany, ⁸ Hochschule Anhalt, Köthen / Anhalt, Germany, ⁹ Teleconnect, Dresden, Germany
We-3B-3	165	Holographic Microwave Imaging: Experimental Study on spatial distribution of antennas for accurate results A. Villavicencio Paz, M. A. Yarlequé Medina <i>Pontificia Universidad Católica del Perú, Lima, Peru</i>
We-3B-4	177	Radio Frequency Spoofing System to Take Over Law-Breaking Drones M. M. Donatti ^{1,2} , F. C. Frazatto ^{1,2} , L. T. Manera ¹ , T. Teramoto ² , E. Neger ² ¹ University of Campinas, Campinas, Brazil, ² Neger Telecom, Campinas, Brazil

POSTER SESSIONS

Monday, December 12

Mo-3P:

ID	PAPER#	TITLE / AUTHORS / AFFILIATIONS
Mo-3P-1	164	Methodology for modeling and implementation of RF Power Amplifiers G. Rafael-Valdivia, H. Ruelas-Galdos, R. Salinas-Roque <i>Universidad Catolica San Pablo, Arequipa, Peru</i>
Mo-3P-2	145	Amplification of Space Charge Waves in n-InN Films of THz Range E. S. Jatirian Foltides, V. V. Grimalsky, S. V. Koshevaya, J. Escobedo-Alatorre <i>Autonomous University of State Morelos (UAEM), Cuernavaca, Mexico</i>
Mo-3P-3	129	On the sensitivity of the skull thickness for the SAR assesment in the intracranial tissues C. E. Fernández-Rodríguez ^{1,2} , A. A. de Salles ² ¹ <i>Federal Institute of Education, Science and Technology of Rio Grande do Sul – IFRS, Canoas, Brazil,</i> ² <i>Federal University of Rio Grande do Sul – UFRGS, Porto Alegre, Brazil</i>

Mo-7P:

ID	PAPER#	TITLE / AUTHORS / AFFILIATIONS
Mo-7P-1	116	Comparison of Different Beam Forming Circuits C. Jackson, J. Ng, M. Herndon <i>Northrop Grumman, Redondo Beach, USA</i>
Mo-7P-2	153	Temperature Effects in Automotive Grade High Speed Interconnects J. R. del-Rey ^{1,2} , Z. Brito-Brito ² , J. E. Rayas-Sanchez ² , N. Izquierdo ¹ ¹ <i>Continental Automotive Group, Tlaquepaque, Mexico,</i> ² <i>ITESO - The Jesuit University of Guadalajara, Tlaquepaque, Mexico</i>
Mo-7P-3	132	0.5-20 GHz UWB Distributed Combiners for Multi-Antenna Receivers P. Testa, C. Carta, M. Barahona, B. Klein, R. Hahnel, D. Plettermeier, F. Ellinger <i>Technische Universität Dresden, Dresden, Germany</i>

POSTER SESSIONS

Tuesday, December 13

Tu-3P:

ID	PAPER#	TITLE / AUTHORS / AFFILIATIONS
Tu-3P-1	154	<p>Analytical Method to Calculate the Unloaded Q of a New Type of Stepped-Impedance Resonator E. Cruz-Pérez^{2,1}, H. Alavil, A. Jaimes-Vera¹, J. R. Camacho-Perez¹ ¹Intel Tecnología de México, Zapopan, Mexico, ²Instituto Nacional de Astrofísica, Óptica y Electrónica, Sta Maria Tonanzintla, Mexico</p>
Tu-3P-2	130	<p>Dual-Band Bandpass Filter with Wide Stopband and Low Insertion Loss for GNSS Signals R. Lopez La Valle, J. G. Garcia, P. A. Roncagliolo Universidad Nacional de La Plata, La Plata, Argentina</p>
Tu-3P-3	159	<p>Design of Nine Pole Microstrip Low Pass Filter with Metal Loaded Defected Ground Structure A. Kumar, H. Alavi, J. A. Mix, E. Colin-Beltran, E. Cruz-Perez, A. Jaimes-Vera, H. Visairo-Cruz Intel Lab, Zapopan, Mexico</p>
Tu-3P-4	184	<p>An Equivalent Electrical Circuit Model for Spiral and Cross Inductors on 0.35 um CMOS Technology J. Fontebasso Neto^{1,2}, L. C. Moreira¹, F. S. Correra² ¹Catholic University of Santos - Unisantos, Santos, Brazil, ²University of São Paulo, São Paulo, Brazil</p>

POSTER SESSIONS

Tuesday, December 13

Tu-6P:

ID	PAPER#	TITLE / AUTHORS / AFFILIATIONS
Tu-6P-1	111	<p>Maximum Entropy Neural Networks for Feature Enhanced Imaging via Collaborative Microwave Multi-Sensor Data Fusion Y. V. Shkvarko^{1,2}, J. A. Lopez^{1,2}, S. R. Santos² ¹Cinvestav - IPN, Guadalajara, Mexico, ²UdeG - CUCEI, Guadalajara, Mexico</p>
Tu-6P-2	173	<p>Correlation Analysis of Propagation Models for an DVB-T2 Network in an Urban Scenario of Bogota D. C. (Colombia) J. E. Arévalo Peña, R. A. González Bustamante Fundación Universidad Autónoma de Colombia, Bogotá D.C., Colom</p>
Tu-6P-3	186	<p>Low-power device for wireless sensor network for Smart Cities C. A. Ramirez, R. C. Barragan, G. García-Torales, V. M. Larios Universidad de Guadalajara, Guadalajara, Mexico</p>



Exhibition



LAMC-2016 Exhibition is held in conjunction with the technical sessions and offers a great opportunity to meet colleagues and establish future business. It will take place at Expo Baganvillas, in our venue hotel, a few steps from the conference rooms. LAMC-2016 Poster Sessions will be implemented in that same area to encourage technical and commercial interactions.

Our two-day exhibition will include high-tech companies that represent the state-of-the art in the region when it comes to materials, components, and test/measurement equipment, as well as design and simulation software. You will find an industry leader willing and ready to answer your purchasing and technical questions. In addition, our exhibition will consider government agencies promoting high-tech industry investment and development, as well as local research centers and universities.

Come and experience LAMC exhibition and learn about recent advances within the RF and microwave industry.

Exhibition Dates and Hours:

Monday Dec. 12, 09:30 to 17:30

Tuesday Dec. 13, 08:30 to 16:30

Organizations Participating in LAMC-2016 Exhibition





Networking and Social



Monday, December 12

TIME	PLACE	DESCRIPTION
07:00-11:00	<i>La Villita Restaurant</i>	Buffet breakfast (complimentary for LAMC attendees staying at venue hotel)
12:55-13:55	<i>Las Gaviotas Restaurant</i>	Lunch (complimentary for LAMC regular attendees)
18:30-19:30	<i>Jardin Carreta</i>	Welcome Cocktail (one hour of domestic open bar complimentary for LAMC attendees staying at venue hotel)
19:30-21:00	<i>Jardin Carreta</i>	Welcome Reception (complimentary for LAMC regular attendees)

Tuesday, December 13

TIME	PLACE	DESCRIPTION
07:00-11:00	<i>La Villita Restaurant</i>	Buffet breakfast (complimentary for LAMC attendees staying at venue hotel)
12:50-13:50	<i>Las Gaviotas Restaurant</i>	Lunch (complimentary for LAMC regular attendees)
16:45-23:45	<i>Lobby (16:45)</i>	Gala Dinner at Las Caletas

Wednesday, December 14

TIME	PLACE	DESCRIPTION
07:00-11:00	<i>La Villita Restaurant</i>	Buffet breakfast (complimentary for LAMC attendees staying at venue hotel)
12:40-13:40	<i>Las Gaviotas Restaurant</i>	Lunch (complimentary for LAMC regular attendees)
17:40-19:30	<i>Jardin Carreta</i>	Tequila Tasting (complimentary for all LAMC attendees)



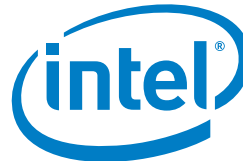
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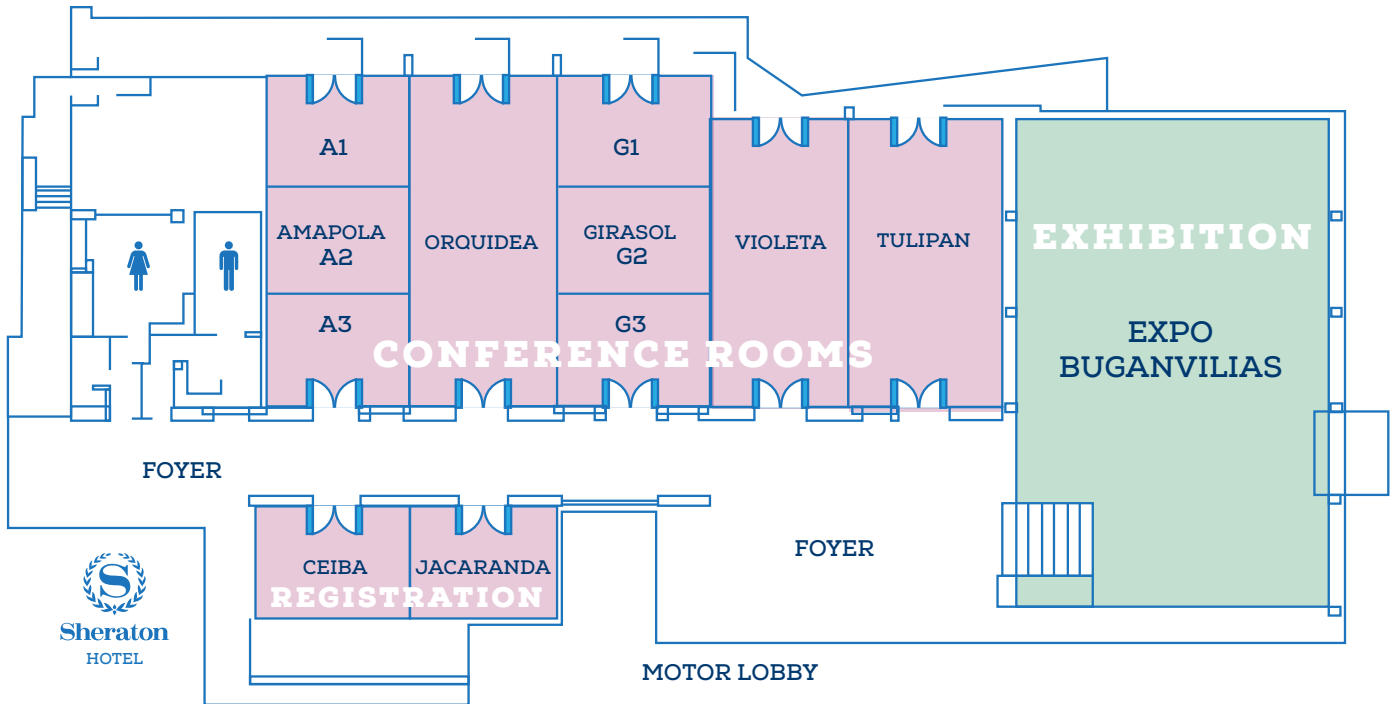
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