

2016 IEEE MTT-S International Conference on Microwaves for Intelligent Mobility (ICMIM 2016)

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19-20 May 2016**



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May 19-20, 2016 San Diego, CA USA

Technical Program

Thursday May 19, 2016			
Opening Session			
	700	830	Registration and Breakfast
	830	845	Welcome Address from ICMIM2016 General Chair and Co-Chair
			TH1: Recent Progress Towards Autonomous Driving Session Chairs: George Ponchak and Martin Vossiek
TH1-1	845	925	<i>Intelligent, Aware and Connected Mobility Systems</i> N/A Tim Talty, GM R&D, Warren, MI, USA, Keynote Invited Speaker
TH1-2	925	1005	<i>ADAS and Automated Driving Now and Future</i> N/A Toshio Yokoyama, Honda, Automobile R&D Center, Keynote Invited Speaker
TH1-3	1005	1045	<i>Phased Array Automotive Radar Sensor</i> N/A Jae Lee and Paul Schmalenberg (Toyota USA), Keynote Invited Speaker
	1045	1100	Break
			TH2: Coexistence of Communication Systems with Other Systems Session Chairs: Christian Waldschmidt and Hiroshi Kondoh
TH2-1	1100	1120	<i>Demonstration of Interference Cancellation in a Multiple-User Access OFDM MIMO Radar-Communication Network using USRPs</i> 1 Y. Sit et al., Karlsruhe Institute of Tech., Karlsruhe, Germany
TH2-2	1120	1140	<i>Bats-inspired Frequency Hopping for Mitigation of Interference between Automotive Radar</i> 5 J. Bechter et al., Ulm University, Ulm, Germany
TH2-3	1140	1200	<i>Reliable Data Link for Power Transfer Control in an Inductive Charging System for Electric Vehicles</i> 9 B. Sanftl et al., Univ of Erlangen-Nuremberg, Germany, Fraunhofer IISB, Germany
	1200	1300	Lunch
			TH3: Signal Processing for Advanced Automotive Radar Systems for Higher Resolution and Reliability Session Chairs: Thomas Zwick and Reinhard Feger
TH3-1	1300	1320	<i>Adaptive Clustering for Contour Estimation of Vehicles for High-Resolution Radar</i> 12 J. Schlichenmaie et al., Ulm University, Germany, Robert Bosch Germany
TH3-2	1320	1340	<i>Potential of Radar for Static Object Classification using Deep Learning Methods</i> 16 J. Lombacher et al., Daimler AG, Ulm, Germany, TU Dortmund, Dresden, Germany

TH3-3	1340	1400	Interesting Areas in Radar Gridmaps for Vehicle Self-Localization 20 K. Werber et al., Daimler AG, Ulm, Germany, Ulm University, Ulm, Germany
TH3-4	1400	1420	Vibrations in Automotive Radar Systems 24 M. Harter et al., Robert Bosch GmbH, Leonberg, Germany
TH3-5	1420	1440	Blockage detection algorithm for automotive radars 28 M. R. Fetterman et al., Autoliv, Lowell, United States
TH3-6	1440	1500	FSCD and BASD: Robust Landmark Detection and Description on Radar-Based Grids 32 M. Rapp et al., Ulm University, Ulm, Germany, Daimler AG, Ulm, Germany
	1500	1515	Break
TH4: Advances in Radar Detection Schemes Session Chairs: Reinhard Feger and George Ponchak			
TH4-1	1515	1555	Vector Parameter Estimation in FMCW Radar 36 G. Malysa M. Ali, Texas Instruments, Dallas, United States, Keynote Invited Speaker
TH4-2	1555	1615	79 GHz Wideband Fast Chirp Automotive Radar Sensor with Agile Bandwidth 40 C. Sturm et al., VALEO Schalter und Sensoren, Germany
TH4-3	1615	1635	Digital Beamforming to Mitigate Automotive Radar Interference 43 J. Bechter et al., Ulm University, Ulm, Germany
TH4-4	1635	1655	Parametric Estimation of Distances with a 122 GHz FMCW Radar System 47 S. Scherr et al., Karlsruhe Institute of Technology (KIT), Silicon Radar GmbH, Germany
TH4-5	1655	1715	Optimization of Codes and Weighting Functions for Binary Phase-Coded FMCW MIMO Radars 51 R. Feger et al., Johannes Kepler University Linz, Linz, Austria
			Adjourn for the day
	1800	2030	Reception
Friday May 20, 2016			
	700	800	Breakfast
			FR1: Advances in Technologies and Components for mm-wave Radars I Session Chairs: Hiroshi Kondoh and Dr. Juergen Hasch
FR1-1	800	840	Towards 0.7 Terahertz Silicon Germanium Heterojunction Bipolar Technology: The European DOTSEVEN Project N/A Michael Schroter, Technical University Dresden, Germany, Keynote Invited Speaker
FR1-2	840	920	The Evolving Automotive Radar Landscape: Waveform, System Partitioning and IC Technologies N/A C. Vaucher, NXP, Netherlands, Keynote Invited Speaker
FR1-3	920	940	A SiGe-Based Broadband 140-170-GHz Downconverter for High Resolution FMCW Radar Applications 55 F. Ahmed et al., Johannes Kepler University, Austria, IHP, Frankfurt (Oder), Germany
	940	950	Break
			FR2: Advances in Technologies and Components for mm-wave Radars II Session Chairs: Dr. Juergen Hasch and Hasan Sharifi
FR2-1	950	1010	SiGe Power Amplifier for Automotive Radar Applications from 76 to 81 GHz 59 J. Wursthorn et al., Universitaet der Bundeswehr Muenchen, Germany, Infineon Technologies AG, Germany

FR2-2	1010	1030	Improved Active Quasi Circulator with Integrated Digital Leakage Canceler in BiCMOS Technology 63 M. Porranzi et al., Johannes Kepler Universität Linz, Linz, Austria, Danube Integrated Circuit Engineering (DICE), Linz, Austria
FR2-3	1030	1050	A 120-GHz Wideband FMCW Radar Demonstrator Based on a Fully-Integrated SiGe Transceiver with Antenna-in-Package 67 M. Furqan et al., University, Linz, Austria, Infineon Technologies AG, Munich, Germany
FR2-4	1050	1110	Amplitude Noise Measurement of an Automotive 77-GHz VCO 71 H. Jaeger et al., DICE GmbH & Co KG, Linz, Austria, Infineon Technologies AG, Germany, Johannes Kepler University, Linz, Austria
	1110	1120	Break
			FR3: Wireless Localization and Positioning Session Chair: Martin Vossiek
FR3-1	1120	1140	Mobile Robot 6D Pose Estimation Using a Wireless Localization Network 74 Y. Dobrev et al., Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU), Erlangen, Germany, DFKI GmbH, Bremen, Germany
FR3-2	1140	1200	Chipless UWB TDR RFID Landmark-Based Positioning Using Polarimetric Filtering 78 M. Pöpperl et al., Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany
	1200	1220	Conference Closing and Adjourn for the Day