



IEEE EMC Society Chapter Meeting Announcement

The Rocky Mountain, Twin Cities, Phoenix, San Diego, SE Michigan, Sweden, and Italy EMC Chapters,
Together with ANSI C63®, Announce a LIVE Webinar:

The Emerging Implications of Wireless Coexistence on Today's Modern Vehicles

Date: Wednesday, October 21, 2020

Time: 9:00 am PDT	Welcome and Announcements – Dan Hoolihan, Chair, ANSI ASC C63®
9:05 am	An Overview of Wireless Coexistence Measurements and Challenges: Why Can't We All Get Along? by Jason Coder, Shared Spectrum Metrology Group Leader, National Institute of Standards and Technology (NIST), Boulder, Colorado
9:35 am	Wireless Coexistence Implications on Automotive Test and Measurement Applications, by Garth D'Abreu, Director, Automotive Solutions at ETS-Lindgren, Cedar Park, Texas
10:05 am	Q&A with the speakers, moderated by Dan Hoolihan <i><u>(See presentation abstracts and speaker bios below.)</u></i>
10:30 am	Wrap Up/Final Comments

Register: [Click here](https://attendee.gotowebinar.com/register/8062889600649694480) to register now on line or enter the following on your browser:
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Questions: Janet O'Neil, ETS-Lindgren, cell (425) 443-8106, email j.n.oneil@ieee.org

TECHNICAL PROGRAM

An Overview of Wireless Coexistence Measurements and Challenges: Why Can't We All Get Along?

By Jason Coder, Shared Spectrum Metrology Group Leader, National Institute of Standards and Technology (NIST), Boulder, Colorado

Abstract: Wireless coexistence is a formidable problem that limits access and use of spectrum in today's connected world. End-users, system administrators, network planners, and regulators all desire to understand how their wireless devices, systems, or networks will perform amid many other wireless devices before they are deployed. Given this desire, how can we design tests that quantify wireless performance? To start, can we pin down what quantities represent good wireless performance? How should test results be interpreted? This talk will present an overview of the concept of wireless coexistence in general, then discuss coexistence models, measurements, standards, and challenges. The goal of this presentation is to leave audience members with a better understanding of what coexistence is (or isn't) and a deeper understanding of how we can tackle coexistence problems to enable better access to spectrum.

Wireless Coexistence Implications on Automotive Test and Measurement Applications

By Garth D'Abreu, Director, Automotive Solutions at ETS-Lindgren, Cedar Park, Texas

Abstract: In the rapidly evolving industry of autonomous, electric, and hybrid vehicles, the ability to successfully provide vehicle level antenna pattern measurements as well as EMC measurements to verify the performance of Advanced Driver Assistance Systems (ADAS) will be key to the future of this market and address public safety concerns. The automotive trends in wireless capabilities for high data streaming functions such as vehicle-to-everything (V2X) communication and other systems including anti-collision/adaptive cruise control radar as well as general wireless based functions such as navigation and infotainment, are just a few of the features impacting the functionality of today's modern vehicles. This presentation details the challenges presented by these market demands, the implications of wireless coexistence on today's modern vehicles, and how innovative testing solutions help drive the technologies forward to real-life applications.

SPEAKER BIOGRAPHIES



Jason Coder currently leads the Shared Spectrum Metrology Group in the National Institute of Standards and Technology's Communications Technology Laboratory. During his tenure at NIST, Mr. Coder has worked in fundamental EM measurements, EMC, and antenna measurements. His current research focuses on developing new measurement methods for spectrum sharing, wireless coexistence, and interference. Mr. Coder currently serves as the Chair of the ANSI C63.27 working group on Wireless Coexistence, and the Chair of ANSI C63 Subcommittee 7 on Spectrum Etiquette. Mr. Coder received his B.S.E.E. and M.S.E.E degrees from the University of Colorado Denver in 2008 and 2010, respectively.



Garth D'Abreu is the Director, Automotive Solutions at ETS-Lindgren based at the corporate headquarters office in Cedar Park, Texas. He has primary responsibility for the design and development functions worldwide within the Systems Engineering group, specializing in turnkey solutions for Automotive EMC and Wireless test integration. Some of these more complex full vehicle and electronic sub-assembly (ESA) test chambers involve his coordination with the RF engineering team on custom components, and the certified, internal Building Information Modeling (BIM) team at ETS-Lindgren. Due to his considerable industry experience, he is the ETS-Lindgren global subject matter expert responsible for the ongoing research and development of Automotive EMC/Wireless test chambers for Regular, Autonomous, Electric and Hybrid Electric Vehicles, focusing on combination anechoic chambers, reverberation chambers, GTEM cells, EMP protection applications and wireless device (antenna measurement) test systems. Mr. D'Abreu is a member of the IEEE EMC Society and active participant in standards development, including the SAE, ISO and CISPR D automotive EMC standards, with over 25 years of experience in the RF industry. He holds a BSc degree in Electronics & Communications Engineering, from North London University, UK.

HOST AND MODERATOR



Daniel D. Hoolihan is currently President of Hoolihan EMC Consulting. His 50 years of experience in the EMC engineering profession began at Control Data Corporation. Since January 2020, he has been consulting in EMC engineering. He is presently Chair of the ANSI Accredited Standards Committee C63® on EMC. Mr. Hoolihan has been a member of the IEEE since 1983 and is currently a Life Senior Member. From 1998-1999 he was President of the IEEE EMC Society and has served on its Board of Directors for many years since 1987. He has held numerous leadership positions within the EMC Society and currently serves as Chair of the History Committee. Mr. Hoolihan received his MS degree in Physics from Louisiana State University in 1969 and his MBA from the University of Minnesota in 1975.