



**IEEE Southeastern Michigan Section
Chapter IV and Chapter VIII
Pizza, Salad, and Beverages – 5:30 to 6:00 pm
Talk – 6:00 to 7:00 pm
Thursday, July 21, 2016
Presentation Room, Bosch Building,
15000 Haggerty Way, Plymouth, MI**

Pizza Sponsor:



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“An Introduction to Free-Field Measurements of Wireless Devices in Reverberation Chambers”

Kate Remley

National Institute of Standards and Technology
IEEE EMC Distinguished Lecturer

Abstract:

When the antenna is integrated into the body of a wireless device, as it is for cell phones and many other portable devices, performance testing is typically done under free-field conditions. In this overview presentation, we will discuss free-field characterization of some key wireless-device parameters by use of reverberation chambers. Measurements in reverberation chambers must be averaged over a sufficient number of samples in which the modes of the chamber are randomized or “stirred.” We will discuss recent research on the use of these chambers for testing devices that transmit modulated signals.

Speaker’s Biography:

Kate A. Remley (S'92-M'99-SM'06-F'13) was born in Ann Arbor, MI. She received the Ph.D. degree in Electrical and Computer Engineering from Oregon State University, Corvallis, in 1999.

From 1983 to 1992, she was a Broadcast Engineer in Eugene, OR, serving as Chief Engineer of an AM/FM broadcast station from 1989-1991. In 1999, she joined the RF Technology Division of the National Institute of Standards and Technology (NIST), Boulder, CO, as an Electronics Engineer. She is currently the leader of the Metrology for Wireless Systems Group at NIST, where her research activities include development of calibrated measurements for microwave and millimeter-wave wireless systems, characterizing the link between nonlinear circuits and system performance, and developing standardized test methods for RF equipment used by the public-safety community.

Dr. Remley was the recipient of the Department of Commerce Bronze and Silver Medals, an ARFTG Best Paper Award, and is a member of the Oregon State University Academy of Distinguished Engineers. She was the Chair of the MTT-11 Technical Committee on Microwave Measurements from 2008 - 2010 and the Editor-in-Chief of IEEE Microwave Magazine from 2009 - 2011, and is the Chair of the MTT Fellow Committee.

Registration at: <https://meetings.vtools.ieee.org/m/38563>