What is my measurement equipment actually doing? Implications for 5G/6G, mm-wave and related applications by Dr. Jon Martens

SYNOPSIS

Current microwave and high frequency instrumentation perform many tasks behind the scenes, even more so in the mm-wave and high modulation rate regimes that are critical for new communications, imaging, and related application, and it is easy to lose track of how the equipment, the processing algorithms, the setup/environment and the signals are interacting. By exploring the measurement mechanics within some common instruments under practical conditions, it may be easier to understand where sensitivities or anomalies might increase, how to mitigate them and how the hardware has been evolving. Through a study of example architectures and measurements, including those in the 100+ GHz range and those with wide modulation bandwidths where linearity, dynamic range and other physical metrics are stressed even more, mechanisms and ideas for better measurements will be explored.

DISTINGUISHED MICROWAVE LECTURER BIO

Dr. Jon Martens has been with Anritsu since 1995 where he is currently an Engineering Fellow. His research interests include measurement system architectures and pathologies, millimeter-wave circuit and system design, and a wide range of microwave measurement processes to include materials analysis, nonlinear and quasi-linear characterization, optical interactions, free-space measurements, and calibration. He is the inventor or co-inventor on over 20 patents, has (co-)authored several book chapters and over 50 technical publications. Dr. Martens is a past chair of the MTT measurements technical subcommittee and is a past president of the measurements society ARFTG and is still active in both. He is a former associate editor for the Transactions on Microwave Theory and Techniques.

Viernes 28 de Octubre de 2022, 16:00 hrs. Evento presencial y virtual.
Entrada libre, cupo limitado
Interesados reservar lugar registrándose en este LINK