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SEMINAR ANNOUNCEMENT

Understanding Time Domain Post-Processing Techniques for Antenna Measurements

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Abstract. Time domain gating is widely used in antenna measurements, for example, to remove multipath reflections in the measurement data. Because of its popularity, the algorithm has been implemented as a built-in function in most Vector Network Analyzers (VNAs). Many engineers treat it as a blackbox function, with limited understanding of its implementation, limitations and proper usage. In this seminar and demonstration, we strive to provide an in-depth look into the algorithm, and provide practical tips on the proper usage of the time domain gating functions, such as the selection of windowing functions, gate start/end times, and band edge treatment.

Bio. Zhong Chen is the Director of RF Engineering with ETS-Lindgren, located in Cedar Park, Texas. He has over 25 years of experience in RF testing, anechoic chamber design, as well as antenna and EMC field probe design and measurements. He is a past member of the Antenna Measurement Techniques Association (AMTA) Board of Directors and is currently a member of the IEEE EMC Society Board of Directors. Mr. Chen is the Chair of Subcommittee 1 of ANSC C63, which is responsible for EMC antenna calibration and test site validation standards. He is also chair of the IEEE Standard 1309 committee responsible for developing calibration standards for field probes, and IEEE Standard 1128 for absorber measurements. He has served as a Distinguished Lecturer for the IEEE EMC Society. His research interests include measurement uncertainty, time domain measurements, and development of novel RF absorber materials. Mr. Chen received his M.S.E.E. degree in Electromagnetics from the Ohio State University at Columbus.