



Online

EMC Distinguished Lecture

How to Perform Mobile Channel Measurements Using a CW System

Co-invited by IEEE EMCS German, Poland and Benelux Chapters

Dr. Robert (Bob) Johnk

Electronic Engineer, retired from the Institute for
Telecommunication Sciences (NTIA/ITS) , Boulder, Colorado



Date: 26th Mar. 2024, Tuesday

Time: 15:00 -16:00 (CET, UTC+1)

08:00 - 09:00 (MDT, UTC-6)

On-line: Zoom

[https://tuhh.zoom.us/j/3212339859?pwd=RzVsdVBHdHVRY0hRMI
NWdXNRaHVmUT09](https://tuhh.zoom.us/j/3212339859?pwd=RzVsdVBHdHVRY0hRMI
NWdXNRaHVmUT09)

Meeting ID: 321 233 9859, Passcode: 463240



EMC Distinguished Lecture by Dr. Robert Johnk

How to Perform Mobile Channel Measurements Using a CW System

Abstract: This talk describes how to conduct mobile channel measurements in a wide range of outdoor urban and subterranean environments such as tunnels and coal mines. The talk will describe the methods, equipment, and the post processing of data to obtain useful propagation parameters such as Path Loss, Doppler spreading, and K-factors. This talk will be of interest to both the wireless and EMC communities. The results of these types of measurements are used by spectrum managers to inform national policy. Results from measurement campaigns in both outdoor urban and subterranean environments (tunnel and coal mine). This talk will give an overview of the measurement methods, testing setups, and associated data processing will be presented. This talk will be of interest to wireless/radio system designers, EMC engineers, spectrum engineers, and spectrum policy makers.

Biography: Robert (Bob) Johnk (M'91 – SM'07) received his Ph.D. degree in Electrical Engineering at the University of Colorado in 1990, where he specialized in electromagnetics and antennas. Bob recently retired from the Institute for Telecommunication Sciences (NTIA/ITS) where he was engaged in advancing the state of the art in radio-channel propagation measurements/analysis and mentoring new engineers in the art of measurement science. During the development of the FirstNet National Public Safety Radio System, Bob conducted research on in-building wireless propagation and methods for improving in-building public safety communications. Prior to joining NTIA/ITS in 2007, he worked at the National Institute of Standards and Technology (NIST) in Boulder, Colorado for 17 years, where he was the leader of the time-domain fields project. Bob has received best paper awards from the IEEE EMC Society, NTIA, and NIST. In 2011, Bob received the IEEE EMC Society's Technical Achievement Award for his work "in the development of free-space time-domain measurement techniques". Bob has also received a U.S. Department of Commerce Silver Medal award for his work in Public Safety communications. Bob is a Life Senior member of the IEEE EMCS and a member of both Eta Kappa Nu and Tau Beta Pi. Bob has enjoyed a blessed career that has been rewarding, a great adventure, and often fun.