



## JOINT TECHNICAL EVENT

EMC talks by Dr. Derat and Mr. Cecca & EMI workshop by Mr. Hill  
Hosted by IEEE EMC Society German Chapter and Rohde & Schwarz



**IEEE**

**EMC**  
SOCIETY® German Chapter

**Date:** June 25<sup>th</sup>, 2025

**Time:** 13:00 – 18:00 CEST

**Place (on-site, limited seats or online):**

Rohde & Schwarz GmbH & Co. KG  
Muehldorfstrasse 15  
81671 Munich

**How:**

Register before June 5, 2025, select on-site or online.

[www.rohde-schwarz.com/IEEE-EMC](http://www.rohde-schwarz.com/IEEE-EMC)

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Join us for a technical event featuring EMC talks by Dr. Benoit Derat and Mr. Francesco Pio Cecca and an EMI troubleshooting workshop by Mr. Lee Hill.

On-site delegates can network with industry colleagues during the social event and tour the EMC test facility at Rohde & Schwarz.

**For questions, please contact:**

Ms. Arthi Krishnamurthy, Rohde & Schwarz  
IEEE EMC Society - Member

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PRESENTATION TITLE	DESCRIPTION	PRESENTER
<p><b>The Antenna Digital Twin – When Measurements and Simulations Unite</b></p>	<p>Antenna or OTA measurements are blind. Knowing the detailed implementation of the device under test is not needed to realize them. They even include all production tolerances that might impact performance. However, measurements are limited to canonical test environments, e.g. in anechoic chambers. Simulations, on the contrary, can give access to electromagnetic fields in practically any scenario. Yet, simulations are only as good as the knowledge of the very details of the radiation source. What if one could unite the two and benefit from the combined strengths of experimental and numerical techniques? This talk shows how to enable this with the augmented OTA approach, involving the creation of an antenna digital twin, based on actual measured data. Practical applications are demonstrated, including field characterization inside the car and EMF assessments with virtual human models.</p>	<p><b>Dr. Benoit Derat</b></p>
<p><b>Time Domain Plane Wave Model for Single Carrier Pulse Response in Reverberation Chambers</b></p>	<p>When pulsed excitations are used as transmitted signals in a reverberation chamber, the presence of unexpected peaks in the transient part; dangerous during immunity testing, need to be considered. Based on the frequency domain integral plane wave representation, a theoretical description of how pulsed excitations behaves in reverberation chamber is presented. Theoretical results are also compared with measurement.</p>	<p><b>Mr. Francesco Pio Cecca</b></p>
<p><b>Would You Like Some EMI With Your Coffee?</b></p>	<p>In this interactive session, Lee will lead the audience through an actual past radiated emissions troubleshooting project: an electronic coffee machine with a digital display. He will discuss the different aspects of the problem analysis and the possible solutions. During this presentation Lee will measure and demonstrate noise emitted by several ordinary electronic devices using an EMI test receiver. This session will focus primarily on EMC design and troubleshooting. During his talk, Lee will ask the audience to help him fix the source of noise and terrible coffee. Come ready to text in your answers!</p>	<p><b>Mr. Lee Hill</b></p>

PRESENTER	PRESENTER BIO	PRESENTER PHOTO
<p><b>Dr. Benoit Derat</b></p> <p><i>IEEE EMC Society Distinguished Lecturer, Term 2024-2025</i></p> <p><i>Senior Director of Engineering [VNA, EMC, Antenna Test] at Rohde &amp; Schwarz</i></p>	<p>Benoit Derat received the Engineering degree from SUPELEC, in 2002, and the Ph.D. degree (Hons.) in physics from the University of Paris XI, in 2006. From 2002 to 2008, he worked at SAGEM Mobiles, as an Antenna Design and Electromagnetics Research Engineer. In 2009, he founded ART-Fi, which created the first vector-array specific absorption rate measurement system. He operated as the CEO and the President of ART-Fi, before joining Rohde &amp; Schwarz, Munich, in 2017. He is currently the Senior Director of Engineering for Vector Network Analyzers, Electromagnetic Compatibility, Over-The-Air and Antenna Test applications. Dr. Derat is a Senior Member of the Antenna Measurement Techniques Association (AMTA) and a Distinguished Lecturer of the IEEE EMC Society (2024 – 2025). He is the author of more than 80 scientific journals and conference papers, and an inventor on more than 40 patents, with focus in antenna systems near and far-field characterization techniques.</p>	
<p><b>Mr. Francesco Pio Cecca</b></p> <p><i>PhD student, Otto von Guericke Universität, Magdeburg, Germany</i></p>	<p>Francesco Pio Cecca was born in Bernalda, Basilicata, Italy, in 2000. He received his Bachelor's and Master's degrees in Electronics Engineering from the Università Politecnica delle Marche, Ancona, Italy, in 2022 and 2024 respectively. Since September 2024, through the MSCA NEPIT project, he is a PhD student at the Otto von Guericke Universität, Magdeburg, Germany.</p>	
<p><b>Mr. Lee Hill</b></p> <p><i>Managing Director, Silent Solutions GmbH</i></p>	<p>Lee Hill has over 35 years of experience in hardware troubleshooting and design reviews to solve &amp; prevent elusive regulatory and functional electrical noise problems. He is Managing Director of Silent Solutions GmbH and currently lives in Munich. Lee is also Founding Partner of SILENT Solutions LLC - an electromagnetic compatibility (EMC) &amp; RF design, troubleshooting, and training firm established in 1992. Lee is a member of adjunct faculty at Worcester Polytechnic Institute (WPI), and an EMC instructor at University of Oxford (England), and a past chair of the IEEE EMC Society's annual EMC Fundamentals program and Clayton R. Paul Global University. He earned his MSEE in electromagnetics from the Missouri University of Science and Technology EMC Laboratory, where he studied under Dr.'s Tom Van Doren, Todd Hubing, and James Drewniak. Lee speaks English, German, American Sign Language and high school Spanish.</p>	