



# EMV Düsseldorf Meeting 2018

## Ein Treffen des Deutschen Chapters der IEEE EMC Society!

Herzlich eingeladen sind alle Mitglieder, die an unseren Aktivitäten interessiert sind und den Kontakt zu unserem Chapter suchen!

Für ein kostenloses Tagesticket für Messe und Mitgliedertreffen melden Sie sich bitte per E-Mail mit Name und Kontaktadresse bei Frau Susanne Kaule, Marketing & Member Services, bis zum **02.02.2018** unter [susanne.kaule@ieee.org](mailto:susanne.kaule@ieee.org)

Get-together, Networking und Informationsaustausch in einem Meeting auf der EMV Düsseldorf!

Treffen Sie alte und neue Kollegen und Freunde, erfahren Sie von den Veranstaltungen des German EMC Chapters in 2017 und die Initiativen für 2018 und lernen Sie das Executive Committee des Chapters sowie unseren Gast-Speaker Lee Hill kennen!

**Datum:** Mittwoch, 21. Februar 2018

**Zeit:** 12:30 - 13:45 Uhr

**Ort:** Messe Düsseldorf, Halle 3, Raum H31  
Eingang CCD Stadthalle  
Rotterdam Str. 141  
40474 Düsseldorf

**Programm:** 12:30 Begrüßung durch den Vorstand  
12:35 Vorstellung des Chapters und seiner Aktivitäten  
12:45 Lee Hill: Hardware Demonstrations for Understanding and Teaching Inductance  
13:30 Abschlussdiskussion und Networking  
13:45 Ende der Veranstaltung



## **Technical Talk by Lee Hill: Hardware Demonstrations for Understanding and Teaching Inductance**

While teaching EMC, troubleshooting EMI problems, and providing EMC design reviews of electronic systems, SILENT has found that many electrical engineers in the US and in Europe have difficulty identifying and reducing inductance in physical structures such as PC boards, cables, and connectors.

In many cases this difficulty is due to university curricula which teaches inductance in the mathematical context of phase angle between current and voltage or magnetic energy storage, rather than in a physical and geometrical context of circuit loop area and perimeter. Yet many practical EMC regulatory problems in real electronic products, such as failing radiated or conducted emissions and immunity tests, can be understood, prevented, and solved by a simple visual and/or computational analysis of circuit inductance.

In this short presentation Lee will share some of the methods and hardware demonstrations that he uses to teach inductance in his university course and in SILENT's for-profit EMC courses.

**Lee Hill** is Founding Partner of SILENT Solutions LLC, an EMC consulting firm he started in Silicon Valley in 1992. He is also Managing Director of Silent Solutions GmbH (Munich).

He earned his MSEE with highest honors from the Missouri University of Science & Technology EMC Laboratory, [emclab.mst.edu](http://emclab.mst.edu), where he studied under Dr.'s Thomas Van Doren, Todd Hubing, and James Drewniak.

He teaches a graduate course in EMC as a member of adjunct faculty at Worcester Polytechnic Institute (WPI) [www.wpi.edu](http://www.wpi.edu), and is also a regular EMC course instructor for University of Oxford (England). Lee is the named inventor of three US patents for EMI control in electronic systems, and provides expert witness services for patent litigation.

While teaching is one of his favorite jobs at SILENT, the majority of Lee's time is spent providing hands-on hardware troubleshooting of / and design reviews to prevent elusive regulatory and functional electrical noise problems.

Lee currently chairs the IEEE EMC Symposium's annual Fundamentals program, and is a regular instructor for Fundamentals as well as the Society's Global University program.

SILENT Solutions LLC & GmbH specializes in EMC and RF design, troubleshooting, and training services to commercial and industrial manufacturers with global distribution in the computer, consumer, network and telecommunications, industrial process control, automotive, medical and scientific instruments, and the military and aerospace industries. SILENT provides these services worldwide to an average of thirty-five clients per year.