

The Institute of Electromagnetic Theory at TUHH and the IEEE German EMC Chapter are pleased to have as international academic guest on November 23, 2018:

Dr. En-Xiao Liu

**Deputy Department Director &
Senior Scientist
Institute of High Performance Computing
(IHPC), Singapore**



Students, faculty, and professionals from academia and industry are invited to attend his Distinguished Lectures supported by the IEEE EMC Society on:

EMC of Nano-composite Laminate Material for Aeronautic Application

followed by

3D Integrated Circuits and EMC

**Room A 0.18.1, Building A (SBC1)
Hamburg University of Technology (TUHH)
Am Schwarzenberg-Campus 1, 21073 Hamburg**

16:00 – 17:30, November 23, 2018

Enxiao Liu is a Senior Member of the IEEE and is currently serving as a Distinguished Lecturer for the IEEE EMC Society. Apart from being Deputy Department Director at the Electronics and Photonics Department of IHPC he is also an Adjunct Professor at the National University of Singapore.

Information on how to get to TUHH:

<http://www.tuhh.de/tuhh/uni/lageplan.html>

Abstract of the Talks:

The first talk will introduce the latest development of nano-composite laminate material with a focus on improving its electrical conductivity for aeronautic applications. The EMC performance analysis of the composite material will be elaborated on two aspects: lightning strike protection and shielding effectiveness. Both experimental testing and modeling results will be discussed.

The second talk will highlight how the rapid growth and convergence of digital computing and wireless communications have been driving the semiconductor technology to continue its evolution following Moore's law in today's nanometer regime and More-than-Moore in the system integration arena. Modern electronic systems, with densely packed complex components and devices, result in a very complex electromagnetic environment. Electromagnetic compatibility (EMC) has thus become one of the major issues, especially for the lately proposed 3D integrated circuit (IC) design. This talk will cover the modeling, measurement, design, and analysis of TSV based 3D ICs, with an emphasis on the EMC related issues and solutions.

Biography of the Speaker:

En-Xiao Liu (M'05-SM'09) received the Ph.D. degree in electrical engineering from the National University of Singapore in 2005. Since 2005, he has been with the Institute of High Performance Computing (IHPC), A*STAR (Agency for Science, Technology, and Research), Singapore. Currently he is Senior Scientist and Deputy Department Director of the Electronics and Photonics Department at IHPC. He is an adjunct Associate Professor in the Electrical and Computer Engineering Department of the National University of Singapore. He has published over 100 papers in refereed international journals and conferences, and two book chapters. His research interests are in the areas of computational electromagnetics, high-speed electronics, and electromagnetic compatibility (EMC).

Dr. Liu received the Technical Achievement Award from the IEEE EMC Society in 2016, Singapore Ministry of Trade Industry (MTI) Borderless Silver Award in 2015, and several Best Paper Awards. He is currently an IEEE EMC Society Distinguished Lecturer, an Associate Editor of the IEEE Transactions on EMC, and a Guest Editor of the IEEE Transactions on CPMT. He has been serving as Chair and executive committee member of the IEEE EMC Singapore Chapter for more than 10 years. He was the General Chair of the 2018 Joint IEEE EMC & APEMC Symposium in Singapore.

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