UCF DEPARTMENT OF ELECTRICAL ENGINEERING AND COMPUTER SCEINCE

Fall 2015 Seminar Series

Presented by the ECE Division

PRE-ASSESSMENT OF RADIATED FIELDS FROM SMALL ELECTRONIC SUBMODULES

FRIDAY SEPTEMBER 11, 2015

10:30 AM – HEC 356

Electromagnetic compatibility (EMC) compliance measurements using CISPR 22 standard represent significant cost and time demands. Therefore the pre-compliance and pre-assessment measurements are used for characterization of equipment during their design and development for reducing the cost and time demands. The professional EMC pre-compliance measurement equipment and accessories are also expensive for small R&D companies. A lot of small companies use “home-made” measurement equipment and accessories in this case. We analyzed the using of “home-made” small shielded enclosure for pre-compliance and pre-assessment measurements of electromagnetic fields emission. The combined approach (modeling and measurement) is used to discover of the worst case of EM-fields emission. This approach is demonstrated using an example of a Submodule-on-Motherboard structure.

DR. TOMAS KORINEK

Czech Technical University

Dr. Tomas Korinek received his M.Sc. and Ph.D. from Czech Technical University in Prague (CTU) in 2005, resp. 2012. From 2007 to 2008, he was a research and designer engineer at RFspin s.r.o., where he was engaged in antennas and microwave circuits. Currently he is an Assistant Professor and the head of the laboratories at the Department of Electromagnetic Field of the Czech Technical University in Prague. His research interests include the area of EMC and antennas - shielding effectiveness measurement of enclosures, interferences measurement and design of special spectrum monitoring antennas. He cooperates with many companies in area of antennas research and special measurements (e.g. T-Mobile Czech Republic, Rohde&Schwarz and Air Navigation Service of the Czech Republic). Dr. Korinek is a chairman of IEEE AP-S for Czech and Slovak Republic (Czechoslovakia section).

Hosted by IEEE EDS Orlando Chapter

UCF

4328 Scorpius Street Room 346 Orlando, FL 32816

WWW.EECS.UCF.EDU