AUG 2015: EMI SEMINAR BY UNIVERSITY OF FLORIDA PROFESSOR DR. SHUO WANG

28 August 2015 - 68 people attended the EMI seminar by Dr. Shuo Wang.

EMI Suppression Techniques for Power Electronics Systems

This seminar addresses EMI theory and EMI reduction techniques for modern power electronics systems. It covers topics such as generation, measurement and suppression of EMI in single phase and three phase power electronics systems. It is designed for the audience from entry to advanced levels. The seminar would be very valuable to power electronics engineers, EMI/EMC engineers, students in Universities as well as the researchers in EMI area.

Session 1 EMI Fundamentals and Coupling Mechanisms

Fundamentals of EMI for power electronics systems Effects of parasitic parameters in power electronics systems on EMI Electric field, magnetic field and related EMI issues in power electronics systems EMI suppression techniques for electric field and magnetic field noise couplings

Session 2 EMI Suppression through Component and Filter Design

EMI suppression components, filters and their high frequency performance Improve EMI component and filter's performance with parasitic cancellation techniques Transformer design for EMI reduction

Active and hybrid EMI filters to achieve high power density design

Session 3 EMI Suppression through System Design

Grounding, parasitic couplings in grounding and the principles of grounding EMI due to unbalance and using impedance balancing to reduce EMI Shielding and its effectiveness on EMI suppression for power electronics systems

Session 4 EMI in Three-phase Power Electronics, EMI Measurement Principles and Predictions

EMI in three phase power electronics systems Principles of EMI/EMC spectrum analyzers Predict EMI spectrum based on the principles of EMC spectrum analyzers Single-phase and three-phase EMI noise measurement and diagnosis

