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Fort Wayne Section Technical Meeting

**Social Hour & Pizza: 6:00PM-6:30PM
Tuesday, November 18, 2014, 6:30PM-7:30PM**

Meeting Location

IPFW Engineering & Technology Building – Room ET 346
Please go to Ft Wayne Section web site to register for the event:
https://purdue.qualtrics.com/SE/?SID=SV_0lkanjGtPGLURG5
By Monday November 17 – Seating is limited



**Pizza
Provided**

Modern Simulation Solutions for Signal and Power Integrity for Efficient Design of PCBs

Speaker: Dr. Peter Krenz, ANSYS, Inc

Peter Krenz (IEEE Member '04) joined ANSYS in 2012 as an application engineer focusing on high-frequency electromagnetics applications. Prior to joining ANSYS, Peter received his BS degree in electrical engineering from the Oklahoma State University, Stillwater, OK in 2003 and his MS and PhD degrees in optics from the University of Central Florida, Orlando, FL in 2008 and 2010. Afterwards, Peter held a two year Postdoctoral Research position with the Center for Nano Science and Technology at the University of Notre Dame, Notre Dame, IN. His PhD and Postdoctoral research interests included the simulation, fabrication, and characterization of uncooled antenna-coupled infrared detectors and infrared transmission lines.

Abstract

As data rates increase on high-speed buses, best efforts must be made to guarantee that voltage and timing margins are robust enough to meet platform design expectations. Hence, the channel must be analyzed to ensure that jitter, crosstalk, PCB board losses and impedance discontinuities are minimized to keep channels from being dominated by these undesirable effects. In addition to this, the system power distribution network must be analyzed to ensure power integrity compliance. Ansys SIWave provides a robust signal and power integrity simulation solution in the post-layout validation phase that has been proven to uncover voltage and timing budget limiters from an SI/PI performance perspective. This presentation introduces Ansys SIwave and covers high speed channel simulation flow using Siwave and Designer SI.