Fort Wayne Section  
Technical Meeting  
Social Hour & Pizza: 6:00PM-6:30PM  
Tuesday, February 10, 2015, 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_0IkanjGtPGLURG5  
By Monday February 9 12pm – Seating is limited

System Modeling and Simulation for Electrified Vehicle Systems  

Speaker: Dr. Zed Tang, ANSYS, Inc  

Zed (Zhangjun) Tang (IEEE Senior Member '06) received his B.S. in Electrical Engineering from Harbin Institute of Technology (Harbin, China) in July of 1994. He completed his M.S. at Beijing Institute of Control Devices (Beijing, China) in March of 1997, and continued on with the institute for 2.5 additional years. From there, he moved to Potsdam, NY where he earned his Ph.D. from Clarkson University in September of 2002. In September 2002, he joined Stryker Instruments, Kalamazoo, MI as a Senior Design Engineer in Powertools Product Platform Research and Development group. He has been working as a Technical Specialist for ANSYS, Inc. in Electromechanical area since November of 2005. He is currently located in Detroit, MI, where he spends most of his time working with electric machine and drive designers in GM, Ford, Chrysler, Delphi, Remy, TRW, General Dynamics, Parker Aerospace, Toyota, Nissan, Hitachi, Siemens VDO, Mercedes-Benz, etc.

Abstract

The design and verification of electrified vehicle systems need the support of system integration tool. This presentation will focus on these capabilities. With decades of application success in power electronic circuits, electric drives, and electromechanical subsytems, Simpler is a multi-domain modeling and simulation platform for optimizing and verifying performance of complex H/EV systems. This presentation will highlight key trends and enablers in system simulation, including standard modeling languages VHDL-AMS and Modelica, links to detailed electromagnetic and thermal component simulation through Reduced-Order Modeling (ROM) interfaces, and the emerging Functional Mock-up Interface (FMI) standard for exchanging and integrating system models.