

## SEMINAR

## **Physics Based Computational Electromagnetic Modeling**

## in Energy and Transportation Electrification Systems

时间: 10月21日(周五)9:30-10:30

地 点: 教二 405

主讲人: Prof. Osama A. Mohammed

Director of Energy Systems Research Laboratory

Florida International University, Miami, USA



Abstract: In this presentation, We'll discuss computational electromagnetic modeling and simulation techniques of energy and transportation electrification systems. The main focus is to develop accurate physics based models to identify terminal parameters and operational interactions between various components in these systems. Then using the developed techniques to identify faults and diagnose how the system interacts with these conditions to provide early warning to increase reliability through prognosis and condition monitoring.

## Testing the Radiated Susceptibility of Units and Sub-systems Onboard Vehicles by Injection or Intentional Crosstalk

时间: 10月21日(周五)10:30-11:30

地 点: 教二 405

主讲人: Prof. Flavia Grassi

Department of Electronics & Information

Politecnico di Milano, Milan, Italy



Abstract: The speech will deal with basic principles and practical implementation of innovative test procedures and setups to verify the radiated-immunity of units and sub-systems interconnected by wiring harness. In particular, alternative procedures assuring equivalence with field-to-wire coupling by exploiting injection and intentional crosstalk to transfer RF energy to the cable harness under test will be presented. These procedures are particularly intended for the automotive sector, since they offer the possibility to perform the test directly on the test bench instead of in expensive test facilities, as required by traditional procedures foreseen by international standards.