

**An IEEE Milwaukee Magnetics Chapter Event**

**Simulation for Today's Engineers: Topics in Electromagnetics**

**Tuesday, November 12, 2024**  
**2:00 pm – 3:00 pm**  
**Olin 202**

Reception to follow in Olin 204  
3:00 pm – 3:30 pm



**Mr. Mark G. Solveson**  
Product Manager, Ansys

**ABSTRACT:** Today's engineers often use simulation in their day-to-day activities. From spreadsheets to mathematical modeling tools, circuit analysis to finite element analysis, these tools enable us to design better products. They can help reduce cost, make insightful decisions about material changes, predict outcomes for untestable scenarios, and cut engineering costs by reducing the build-and-test cycle. A market leader in simulation, Ansys software sets a high standard in mechanical and computational fluid dynamics, as well as electrical and electromagnetics. This talk will focus on interesting electromagnetics applications across a wide application and frequency spectrum and show how simulation can solve many of today's toughest challenges.

**BIOGRAPHY:** Mark is an electro-mechanical engineer with expertise in transformers, inductors, magnetic materials, finite Mark G. Solveson, Product Management, Ansys. Mark has many years of industry experience and numerous patents with the Research and Development Center at Eaton Corporation, where he specialized in the design and analysis of electromechanical devices. Today, he continues with simulation specialization using Ansys electromagnetic FEA and system simulation software for power distribution, automotive, off-road vehicle, healthcare, aerospace, and renewable energy industries. At Ansys, he worked as an Application Engineer, a Manager for the North America Application Engineering team, and now as Product Manager in the Electronics Business Unit responsible for Ansys Motor-CAD, Maxwell, and ConceptEV.