

Model-Centric Engineering, Part 1: *Introduction to Model-Based Systems Engineering*

INCOSE Chapter Meeting

International Council on Systems Engineering • Cleveland-Northern Ohio Chapter

Tuesday
June
17th

Member Meeting • All Welcome

Who: INCOSE Cleveland-Northern Ohio Chapter

What: Video and Discussion

When: Tuesday, June 17, 2014, 5:30 PM

Where: [Moosehead Hoof and Ladder](#)

<http://www.mooseheadrestaurant.com/hoof-and-ladder-olmsted-falls/>

7989 Columbia Rd, Olmsted Falls, OH 44138

Discussion Facilitator: Katie Trase, NASA Glenn Research Center

Recorded Presenter: Daniel L. Dvorak, NASA Jet Propulsion Laboratory

Registration Requested: See Eventbrite link in email announcement or at

<http://www.incose.org/cleveland/>

Introduction for the June & July C-NO Chapter Meetings: System design has been enhanced by the power of Computer-Aided Design (CAD) tools for the past few decades. While these CAD tools have advanced mechanical, electrical, thermal, and other engineering disciplines, systems engineering generally remains a document-centric practice. Recent advances in system modeling are beginning to transition systems engineering to the CAD era. Model-Centric Engineering aims to integrate discipline-specific models with a shared system model. Model-Based Systems Engineering (MBSE) incorporates system requirements, design analysis, and verification and validation activities – across the system lifecycle – within this shared system model. Join fellow C-NO Chapter Members and local MBSE practitioners in an interactive MBSE review session. As a group, we will review NASA-produced overviews of MBSE and system modeling. The MBSE practitioners will answer questions and facilitate group discussion of fundamental MBSE concepts and implementation approaches. The June and July discussions will inform the C-NO Board of Directors toward development of customized, hands-on training in the Systems Modeling Language (SysML) and an MBSE tool. The resulting C-NO Chapter MBSE Tutorial will be scheduled for Fall 2014.

Topics to be Covered in June: Definition of MBSE; current systems engineering challenges that MBSE seeks to address; how system models compare to other discipline models; how MBSE compares to current systems engineering practice; and MBSE adoption challenges and lessons learned. An MBSE case study from a NASA spacecraft will also be discussed.

*The meeting is **free** and **open** to the public. For those in attendance, food and beverage purchases may be made.*

<http://www.INCOSE.org/Cleveland>

