MBSE highlights

33rd Annual INCOSE international symposium

hybrid event

Honolulu HI USA

Saturday, July 15

08:00-12:00 **Basic SysML Modeling with Automated Validation Support**
Michael Vinarcik (INCOSE Michigan Chapter); Chris Swickline (SAIC)

13:30-17:00 **Digital Engineering Basics**
Frank Salvatore (SAIC); Darryl Howell (Powell Consulting Group)

Sunday, July 16

08:00-17:00 **Model-Based Cyber-Physical Systems Engineering: The James Webb Space Telescope as a Case in Point**
Dov Dori (Technion, Israel Institute of Technology)

08:00-12:00 **Systems Engineering MBSE Implementation in Your Organization**
Mark Sampson (Siemens)

Monday, July 17

10:00-10:40 **Enterprise Adoption of DE and MBSE: Lessons from Research**
Tom McDermott (Stevens Institute of Technology); Kaitlin Henderson (Virginia Tech)

11:30-12:10 **Preserving and Sharing Knowledge – Extending the UAF Security Views with Libraries, Patterns and Profiles**
Matthew Hause (SSI)

13:30-14:10 **Making Sense of Alphabet Soup: MBSE and DE**
David Long (Blue Holon)

13:30-14:10 **Digital Engineering, The Next Chapter**
Daniel Hettema (OUSD (R&E)

14:15-14:55 **Shoring Up Atlantis: Knowledge Management for MBSE**
Sharon Fitzsimmons (The Boeing Company)

14:15-14:55 **Engineering Sustainable Products with Collaborative Multi-Domain Modeling**
Sky Matthew

15:30-16:10 **MBSE Model Management Pain Points – Wait, this looks familiar!**
Barry Papke (Dassault Systems); Matthew Hause, David Hetherington (System Strategy, Inc.)

16:15-16:55 **Orion SysML Model, Digital Twin, and Lessons Learned for Artemis I**
Gregory Pierce (NASA Johnson Space Center); Joshua Heeren (Jacobs); Terry Hill (NASA Johnson Space Center)

Tuesday, July 18

10:00-10:40 **MoSSEC – The Common Meta Language Supporting Digital Transformation**
Kyle Hall (Airbus); Juan Carlos Mendo (Boeing)

11:30-12:10 **Systems Engineering Technology: Closing the MBSE Modeling Gap through Community Colleges**
Chris Crumbly, Holly Ralston (Institute for Digital Enterprise Advancement)

MBSE Program Highlights

All times are HST

Tuesday, July 18 (continued)

15:30-16:10 **Explore the Lighter Side of MBSE**
Casey V Medina, Allison Lyle (Studio SE, Ltd.)

15:30-16:10 **Architecting Digital Engineering Requirements for Risk Management & Systems Architecting**
Shannon Dubicki, Risa Gorospe (The Johns Hopkins University Applied Physics Laboratory)

16:15-16:55 **MBSE Model Integration in a Mixed-Fidelity Environment**
Alexander Gaspar, Eric Martens, Bradley Kukurza (Boeing)

16:15-16:55 **On Model Re-Use: Best Practices for the Application and Configuration of Model-Based Patterns**
Devon Clark (Deloitte Consulting); Devon Clark (INCOSE)

Wednesday, July 19

10:00-10:40 **Applying MBSE in Space Based Systems Development**
Chris Swickline (SAIC); Chris Madariaga, Ahmad Bashir (Raytheon)

10:45-11:25 **Where Are You on Your MBSE Journey**
Mark Sampson (Siemens)

11:30-12:10 **System Model Validation: A Framework and SysML Profile for Model-based Systems Engineering**
James Winton, John Colombi, David Jacques (U.S. Air Force Institute of Technology)

13:30-14:10 **Case Studies in Disaster: Modern Digital Engineering Methods and Error Detection**
Heidi Jugovic, Christopher Swickline (SAIC)

14:15-14:55 **Exertional Heat Strain Detection: Application of the Human Performance Model Based Systems Engineering System Architecture (MBSE-SA)**
Tara Sarathi, Heather Morris (MIT Lincoln Laboratory)

Thursday, July 20

08:00-08:40 **Scalable, Flexible Implementation of MBSE and DevOps in VSEs: Design Considerations and a Case Study**
Cailin Simpson, Steven Simske (Colorado State University)

08:45-09:25 **Architecting Descriptive Models for MBSE**
Ryan Noguchi (Aerospace Corporation)

MBSE Lightning Round

10:00-10:20 **Put an end to my MBSE frustration, Please**
Kyle Hall (Airbus)

10:20-10:40 **Next-generation MBSE: Model as the Cyber-physical System Driver**
Dov Dori (Technion)

10:40-11:00 **INCOSE Systems Engineering Laboratory Status**
Heidi Davidz (ManTech)

11:00-11:20 **Building Program Archetypes for Digital Engineering**
David Long, Nicole Hutchison

11:20-11:40 **Strategies to Accelerate MBSE Adoption in SE Practices: Results of the Systems Engineering - Modernization Study**
Tom McDermott (Stevens University)

11:40-12:00 **Proposing an MBSE Minimal Viable Product for Missions of all Risk Levels**
Regan Bullister (LMCO)

MBSE Program Highlights

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Program subject to change - please check the symposium website (www.incose.org/symp2023) for any updates.