



**34<sup>th</sup>** Annual **INCOSE**  
international symposium

hybrid event

Dublin, Ireland  
July 2 - 6, 2024

## In person (IST)

Tuesday, July 2

- 10:00-10:40 **ANDES, the high-resolution spectrograph for the ELT: the adoption of Model-Based Systems Engineering approach**  
*Alessio Zanutta*
- 10:00-10:40 **A Proposal for Model-Based Systems Engineering Method for Creating Secure Cyber-Physical Systems**  
*Gerrit Muller*  
Broadcasted
- 10:45-11:25 **Black Hole Cinema: Application of Systems Engineering Methods to Expand and Enhance an Earth-sized Telescope**  
*Garret Fitzpatrick*
- 14:15-14:55 **Extending Systems Engineering for Safety-Critical Defence Applications**  
*Katia Potiron*
- 15:30-16:10 **Developing an Integrated Mission Simulation to Evaluate Technology Impact on Military Scenarios**  
*Tara Sarathi*
- 15:30-16:10 **Engineering in the Digital Age – Revolutionize Digital Engineering with MBSE**  
*Prof. Dr.-Ing. Lydia Kaiser*  
Broadcasted

Wednesday, July 3

- 10:00-12:10 **MBSE Lightning Round**  
*Daniel Call, Yilong Yang, Sean Flanagan, Ryan Noguchi, Terry R. Hill*  
Broadcasted
- 10:00-10:40 **An MBSE group project challenge as a learning experience for Masters degree students**  
*Paul Davies*
- 13:30-14:10 **Accelerating Digital Transformation through MBSE, Multi-physics Simulation and Digital Twin in Industry**  
*Jacques Martinez*  
Broadcasted
- 14:15-14:55 **The A to Z for Implementing a Digital Transformation on a Systems Project**  
*Kerry Lunney*  
Broadcasted
- 16:15-16:55 **The Digital Engineering Factory: Considerations, Current Status, and Lessons Learned**  
*Joe Gregory*
- 17:00-17:40 **How the INCOSE Model-Based Capability Matrix has Steered Model-Based Systems Engineering Transformation at NASA**  
*Gregory Pierce*

Thursday, July 4

- 10:00-10:40 **Enhancing Data-Driven Decision Making through MBSE**  
*Greg Parnell*
- 10:00-10:40 **How to Develop a Digitization Plan for Standards**  
*Leslie McKay*
- 10:45-11:25 **One Model to Rule them All ... and Through Emergence, Bind Them**  
*Jawahar Bhalla*
- 11:30-12:05 **Digital Data Packages: Making the Digital Thread Work**  
*David Long*
- 13:30-14:55 Panel: **Peace, Love, and Digital Understanding: How system models will bring us all together**  
*Moderator: Kirsten McCane*  
*Panelists: Becky Petteys, Dennis Reed, Cristina Valera Munoz, Risa Gorospe, Alexandra Beaudouin*
- 14:15-14:55 **Practice to adapt MBSE as agility enabler to the agile software development for mobility platforms**  
*Daisuke Hashimoto*
- 15:30-16:10 **Enabling Digital Engineering with Federated PLM – Experiences from the Heliple-2 Project**  
*Jad El-Khoury*
- 16:15-16:55 **Integrating AI with MBSE for Data Extraction from Medical Standards**  
**Broadcasted**  
*Mohammad Chami*
- 16:15-16:55 **Towards a Systems Engineering Ontology Stack**  
*Joe Gregory*

Friday, July 5

- 09:00-09:40 **Digital Engineering Capability Guidance and Maturity Assessment Framework**  
**Broadcasted**  
*Michael Shearin*
- 09:00-11:10 Panel: **Building the digital bridge between MBSE and Engineering Simulation**  
*Moderator: Phyllis Marbach*  
*Panelists: Bernardo Delicado, Tim Morris, Alexander Busch, Hans Peter DeKoning*
- 11:15-11:55 **Excuse me Sir/Madam, which Model?**  
*Erik Herzog*

Saturday, July 6

- 08:00-17:00 Tutorial: **Open Source System Modeling with Python**  
*Ryan Longshore*