

“Enhancing Systems Engineering: Expanding our Process to Meet Future Needs”

This mini-conference will address the application and evolution of systems engineering to meet current and future needs for systematic development. These needs are present not only in the traditional aerospace and defense industries, but also in the commercial and service industries.

Keynote Speaker: Joel Sercel, Ph.D., Caltech

Dr. Sercel is a renowned systems engineering expert with over 25 years experience in academia and in DoD and NASA/JPL projects.

Panel Discussion: “Observations and Comments regarding the Conference Topics and Other Items of Interest by INCOSE Fellows - an Interactive Discussion”

Panelists - Elliot Axelband (Chair), Scott Jackson, Barry Boehm, Jack Ring, Azad Madni, Stan Settles

TRACK 1

Applying Systems Engineering

- “Systems Engineering Applied to Emergency Response” – Andre J. Lee
- “Service Model” – Michael Connally
- “Automating Compliance with Food and Drug Administration Quality System Regulation” – Jim Jones
- “Classical Systems Engineering—Four Types” – Jorg Largent
- “Systems Engineering Applied to On-Air Video Distribution” – Deanna Kidd
- “Transportation Systems to Transport What? Examining the ‘Why’ of Systems Engineering” – Malcolm Currie
- “Systems Engineering Analysis on System of Systems Problems” – Richard G. Cline
- “Brief Introduction to Lean Enablers for Systems Engineering” – Bo Oppenheim

TRACK 2

Right-sizing Systems Engineering

- “An Executable and Integrative Approach to Whole-System Modeling” – Jose S. Garcia, Jr.
- “So You Have Use Cases – Now What? Partitioning the Operations of a Use Case” – Malcolm Currie
- “Test Case for Model-Based Systems Engineering (MBSE) of an Information Enterprise (IE)” Jack Ring
- “Technical Management Is Not Technical Control, or All I Really Need to Know About Systems Engineering I Learned From Farming” - Scott Bryant
- “Feasibility Evidence and the Incremental Commitment Model” – A. Winsor Brown, Dr. Barry Boehm and Jo Anne Lane
- “Applicable Documents” – James Robert van Gaasbeek
- “Estimation Methods for Systems Engineering Reuse” – Jared Fortune
- “Balancing Cost, Performance, Schedule, and Risk” – Dr. Edmund H. Conrow

TRACK 3

Evolving Systems Engineering

- “Emergent Behavior of a System-of-Systems” – John C. Hsu and Marion Butterfield
- “System of Systems Viability Assessment Capability” – Jack Ring and Antonio Pizzarello, Ph.D.
- “Self-Adaptation, Self-Organization and Special Systems Theory” - Kent D. Palmer
- “Services Oriented Architecture for Network-Centric Environment” – Anna Warner
- “Use Cases for Systems Engineering of a System of Systems” – Malcolm Currie
- “Systems of Systems Engineering: Where’s the Beef?” – Dr. Scott Workinger
- “Architecting Resilient Systems: The Fourth Dimension of System Development” – Scott Jackson
- “Simulation of an Intelligent Enterprise as a Complex Adaptive System” – John Clymer

Hot breakfast buffet, lunch buffet, and conference materials will be provided.