WSCR Conference 2023 At-A-Glance

Wednesday, September 13

Time	Tours
8:15 AM - 10:30 AM	LIGO Tour Although it is considered one observatory, LIGO comprises four facilities across the United States, including one of two gravitational wave detectors (the interferometers) right in Hanford. Tour the LIGO Hanford Observatory to review its critical work in the search for gravitational waves.
11:45 AM - 3:45 PM	The B Reactor National Historic Landmark Tour The B Reactor National Historic Landmark is the world's first full-scale plutonium production reactor and part of the Manhattan Project National Historical Park administered by the U.S. Department of Energy and the National Park Service. Learn more about the people, events, science, and engineering that led to the creation of the atomic bombs that helped bring an end to World War II.

Thursday, September 14

Time	Room Horizon A	Room Horizon D	Room Horizon E	Tours
8:00 AM – 12:00 PM	Tutorial 1 PLC-based Cyber Attack Defensive Programming Techniques	Tutorial 2 Automated Architectural Trade Studies	Tutorial 3 Introducing the INCOSE SE Handbook Fifth Edition	8:15 AM - 10:15 AM PNNL Energy Tour
12:00 PM - 1:00 PM	LUNCH			
1:00 PM - 5:00 PM	Tutorial 4 System Architecture Simulation in the Loop of Multiphysics Analysis and Design	Tutorial 5 Leveraging Unified Architecture Framework (UAF) in Engineering Management	Tutorial 6 Back to Basics: Thinking Like a Systems Engineering Practitioner	1:00 PM - 3:00 PM PNNL Energy Science Center Tour
5:00 PM	Walk/Ride to Wine Science Center			
5:30 PM - 6:30 PM	Social Event Wine Science Center (Washington State University)			

Friday, September 15

Time	Room Horizon D	Room Horizon E	Room Horizon A	Room Horizon B
8:00 AM - 09:00 AM	Breakfast and Registration			
09:00 AM- 09:15AM	Welcome Plenary - Introduction (Horizon C)			
09:15 AM - 10:00 AM	Keynote Address: Puesh Kumar, Office of Cybersecurity, Energy Security, and Emergency Response, U.S. Department of Energy (Horizon C)			
10:00 AM - 10:10 AM	Break			
10:10 AM - 11:00 AM	*Case Studies Stream: Innovation* A Rocket Scientist's Approach to Continuous Innovation and Improvement	*Systems Engineering/Education Stream* Get Your ESEP!	*Cyber Security Stream* Eliciting Cyber Security Goals for Cyber Physical Systems in Conceptual Design	*Operational Technology Stream* Legacy System Evolution into an Enterprise
11:00 AM - 11:10 AM	Break			
11:10 AM - 12:00 PM	*Case Studies Stream: Sustainability* Evaluating Environmental Impacts When Designing Systems	*Systems Engineering/Education Stream* A Bridge Blueprint to Span the Chasm Between Research and Engineering - A Framework for Systems Engineering in Early-Stage R&D (ESRD)	*Digital Transformation Stream* INCOSE's Digital Transformation: Where We've Been, Where We're Going, and How We're Getting There	*Cross-Domain Solutions Stream* A Demonstration of MBSEsec Applied to Securing J1939 Protocols on Heavy Vehicle Networks
12:00 AM - 1:40 PM	*LUNCH AND NETWORKING*			
1:40 PM - 2:30 PM	*Case Studies Stream: MBSE* Creating and Using Templates for MBSE Modeling in Capella	*Systems Engineering/Education Stream* Systems of Systems Engineering in Practice	*Digital Transformation Stream* Using the Big Pen: How to Be the Webmaster for Your INCOSE Chapter or Working Group	*Operational Technology Stream* A Tailored System Approach for a Simple System with a Complex Implementation
2:30 PM - 3:10 PM	Snack Time and Networking			
3:10 PM - 4:00 PM	*Case Studies Stream: System Development* Speed to Market - An Incremental Approach to System Development	*Systems Engineering/Education Stream* Open Standards SysML and Modelica Integration Strategy	*Cyber Security Stream* Digital Twin-Based Cyber Attack Detection for Process Control Systems	*Cross-Domain Solutions Stream* Application of Ride-Sharing Assignment Solutions to the Weapon-Target Assignment Problem
4:30 PM	Transportation departs for Dinner			
5:30 PM - 7:00 PM	Dinner/Winery - Terra Blanca Winery			

Saturday, September 16

Time	Room Horizon D	Room Horizon E	Room Horizon A	Room Horizon B
07:00 AM - 09:00AM	SEP Exam (Room Vista) *Alternative: Morning Hike*			
07:30 AM- 08:30AM	Breakfast			
08:30 AM- 08:45AM	Final Plenary - Introduction (Horizon C)			
0845 AM - 09:30AM	Keynote Address: Ian Milgate, Deputy Area Manager for the High-Level Waste Facility, Bechtel (Horizon C)			
09:30 AM - 10:00 AM	Break			
10:00 AM - 10:50 AM	*Case Studies Stream: System Resiliency* The Relationship Between Complexity and Resilience	*Cross-Domain Solutions Stream* How Much Autonomy Is Enough? Applying Systems Engineering Methodology to Autonomy in Modern Systems	*Information Communications Technology (ICT) Stream* Understanding the Emergency Communications Ecosystem	*Systems Engineering and Agile Stream* Becoming More Agile – Hybrid Plan-Driven and Agile Systems Engineering
10:50 AM - 11:00 AM	Break			
11:00 AM - 11:50 AM	*Case Studies Stream: Human Factors* Collaboration, Communications and Culture in Systems Engineering: a Pathway to Smoother Projects	*Cross-Domain Solutions Stream* SE & Photography	*Information Communications Technology (ICT) Stream* Introducing the Communications Primer - A Systems Engineer's Guide to Communications Networks: Modelling Networks as Systems	*Systems Engineering and Agile Stream* Agile Systems Engineering Requirements Analysis
12:00 PM - 1:30 PM	*Poster Sessions/Lunch/Networking* Poster: Systems Engineering Design of a "Mass E" Service Station Facility Poster: In-Line Inspection Tool for Hydrogen Transmission Pipelines Poster: Re-Usable Model Elements Assist Project Management Responsibilities (Prefunction space)			
1:30 PM - 2:15 PM	Concluding Remarks/WSRC 2024 Preview (Horizon C)			