

IS2021 Schedule

Saturday at IS 2021

Start time	End time	Start time	End time	Start time	End time	Start time	End time	Start time	End time	Start time	End time	Start time	End time	Start time	End time		Track 1	Track 2	Track 3	Track 4	Track 5	
US West Coast		US East Coast		UK		Europe		India		China Hongkong		Korea and Japan		Australia Sydney								
05:00	09:00	08:00	12:00	13:00	17:00	14:00	18:00	17:30	21:30	20:00	00:00	21:00	01:00	22:00	02:00	Session A	Tutorial#26: A.1 / Artificial Intelligence for Systems Engineers: Going Deep With Machine Learning and Deep Neural Networks Barclay Brown (Raytheon Technologies); Ramakrishnan Raman (Honeywell Technology Solutions); Ali Raz (George Mason University)	Tutorial#21: A.2 / From Operational Concept Development to Systems Architecture Definition with SysML and MBSE Grid approach Aurelijus Morkevicius, Aiste Aleksandraviciene (Dassault Systemes)	Tutorial#7: A.3 / Overview of the INCOSE SE Handbook Version 4.0 John Clark (Old Dominion University); Gabriela Coe (Northrop Grumman Corporation, Space Systems)	Tutorial#20: A.4 / Handling Organizational Complexity Dean Beale (University of Bristol)	Tutorial#25: A.5 / Introduction to Model Simulation and Engineering Analysis with SysML Saulius Pavalkis, Nerijus Jankevicius (Dassault Systemes)	
09:00	10:00	12:00	13:00	17:00	18:00	18:00	19:00	21:30	22:30	0:00	1:00	1:00	2:00	2:00	3:00	Break						
10:00	11:00	13:00	14:00	18:00	19:00	19:00	20:00	22:30	23:30	1:00	2:00	2:00	3:00	3:00	4:00	Session C	Tutorial#15: C.1 / Systems Security Engineering: A Loss-Driven Focus Mark Winstead (MITRE); Michael McEvilley (The MITRE Corporation); Daryl Hild (MITRE)	Tutorial#24: C.2 / Modeling and Analysis of Standard Operating Procedures Jomana Bashata, Lance Sherry (Center for Air Transportation Systems Research at George Mason University); Steven Dam (SPEC Innovations)	Tutorial#23: C.3 / Leadership Skills for Systems Engineers David Walden (Sysnovation, LLC)			
11:00	12:00	14:00	15:00	19:00	20:00	20:00	21:00	23:30	0:30	2:00	3:00	3:00	4:00	4:00	5:00							
12:00	14:00	15:00	17:00	20:00	22:00	21:00	23:00	0:30	2:30	3:00	5:00	4:00	6:00	5:00	7:00						Tutorial#19: C.4 / Applied Systems Theory to Enhance Systems Engineering Practice for Complex Systems	
14:00	15:00	17:00	18:00	22:00	23:00	23:00	0:00	2:30	3:30	5:00	6:00	6:00	7:00	7:00	8:00						Charles Keating (Old Dominion University); Richard Hodge (DrRichardHodge.com); Joseph Bradley (Leading Change, LLC)	
15:00	16:00	18:00	19:00	23:00	0:00	0:00	1:00	3:30	4:30	6:00	7:00	7:00	8:00	8:00	9:00							

Sunday at IS 2021

Start time	End time	Start time	End time	Start time	End time	Start time	End time	Start time	End time	Start time	End time	Start time	End time	Start time	End time		Track 1	Track 2	Track 3	Track 4	Track 5	
US West Coast		US East Coast		UK		Europe		India		China Hongkong		Korea and Japan		Australia Sydney								
05:00	09:00	08:00	12:00	13:00	17:00	14:00	18:00	17:30	21:30	20:00	00:00	21:00	01:00	22:00	02:00	Session E	Tutorial#26: E.1 / Artificial Intelligence for Systems Engineers: Going Deep With Machine Learning and Deep Neural Networks Barclay Brown (Raytheon Technologies); Ramakrishnan Raman (Honeywell Technology Solutions); Ali Raz (George Mason University)	Tutorial#21: E.2 / From Operational Concept Development to Systems Architecture Definition with SysML and MBSE Grid approach Aurelijus Morkevicius, Aiste Aleksandraviciene (Dassault Systemes)	Tutorial#7: E.3 / Overview of the INCOSE SE Handbook Version 4.0 John Clark (Old Dominion University); Gabriela Coe (Northrop Grumman Corporation, Space Systems)	Tutorial#20: E.4 / Handling Organizational Complexity Dean Beale (University of Bristol)	Tutorial#25: E.5 / Introduction to Model Simulation and Engineering Analysis with SysML Saulius Pavalkis, Nerijus Jankevicius (Dassault Systemes)	
09:00	10:00	12:00	13:00	17:00	18:00	18:00	19:00	21:30	22:30	0:00	1:00	1:00	2:00	2:00	3:00	Break						
10:00	11:00	13:00	14:00	18:00	19:00	19:00	20:00	22:30	23:30	1:00	2:00	2:00	3:00	3:00	4:00	Session G	Tutorial#15: G.1 / Systems Security Engineering: A Loss-Driven Focus Mark Winstead (MITRE); Michael McEvilley (The MITRE Corporation); Daryl Hild (MITRE)		Tutorial#23: G.3 / Leadership Skills for Systems Engineers David Walden (Sysnovation, LLC)			
11:00	12:00	14:00	15:00	19:00	20:00	20:00	21:00	23:30	0:30	2:00	3:00	3:00	4:00	4:00	5:00							
12:00	14:00	15:00	17:00	20:00	22:00	21:00	23:00	0:30	2:30	3:00	5:00	4:00	6:00	5:00	7:00						Tutorial#19: G.4 / Applied Systems Theory to Enhance Systems Engineering Practice for Complex Systems	
14:00	15:00	17:00	18:00	22:00	23:00	23:00	0:00	2:30	3:30	5:00	6:00	6:00	7:00	7:00	8:00						Charles Keating (Old Dominion University); Richard Hodge (DrRichardHodge.com); Joseph Bradley (Leading Change, LLC)	
15:00	16:00	18:00	19:00	23:00	0:00	0:00	1:00	3:30	4:30	6:00	7:00	7:00	8:00	8:00	9:00							

IS2021 Schedule

Monday at IS 2021

Start time	End time	Start time	End time	Start time	End time	Start time	End time	Start time	End time	Start time	End time	Start time	End time	Start time	End time	Track 1	Track 2	Track 3	Track 4	Track 5	
US West Coast	US East Coast	UK	Europe	India	China Hongkong	Korea and Japan	Australia Sydney														
05:00	06:30	08:00	09:30	13:00	14:30	14:00	15:30	17:30	19:00	20:00	21:30	21:00	22:30	22:00	23:30	Keynote	Keynote - Plenary#K1: K1 / Countering Digital Authoritarianism Victoria Coleman (USAF Chief Scientist - Senior Advisor to the Director at CITRIS & the Banatao Institute, University of California Former Director of DARPA)				
06:30	7:00	09:30	10:00	14:30	15:00	15:30	16:00	19:00	19:30	21:30	22:00	22:30	23:00	23:30	0:00	Break					
US West Coast	US East Coast	UK	Europe	India	China Hongkong	Korea and Japan	Australia Sydney										MBSE, System Architecture/Design Definition	Energy (renewable, nuclear, etc.)	System Security, Defense, System Architecture/Design Definition	TechOps Invited Content	
7:00	7:40	10:00	10:40	15:00	15:40	16:00	16:40	19:30	20:10	22:00	22:40	23:00	23:40	0:00	0:40	Session 1 Moderator: Heidi Ann Hahn (New Mexico Tech); Panelists: Nick Lombardo (Pacific Northwest National Laboratory); Michael DiMario (Astrum Systems); Ann Hodges (Sandia National Laboratories); Frédéric Autran (Airbus Defence & Space); Paper#116: 1.2.1 / Model-Based Systems Product Line Engineering of Physical Protection Systems Bedir Tekinerdogan (Wageningen University); Murat Kaan Özcan, Iskender Yakin, Sevil Yağız (Aselsan) Paper#52: 1.2.2 / Applying Systems Engineering framework for architecting a Smart Parking System within a Smart City Nikhil Joshi (HCL Technologies); Mudit Mittal (BlueKei Solutions Pvt. Ltd.); Yatin Jayawant (John Deere India Pvt Ltd.); Pradip Salunkhe, Meena Hattarge (Eaton)	Paper#40: 1.3.1 / Conceptual modeling of energy storage systems Therese Vrenne, Elisabet Syverud, Gerrit Muller (University of South-Eastern Norway)	Paper#112: 1.4.1 / Integrated Security Views in UAF Matthew Hause (Systems Solutions Inc (SSI)); Lars-Olof Kihlström (Syntell AB)	Invited Content#TechOps#1: 1.5 / Panel: To Vee or not to Vee Jon Wade		
7:45	8:25	10:45	11:25	15:45	16:25	16:45	17:25	20:15	20:55	22:45	23:25	23:45	0:25	0:45	1:25		Paper#58: 1.3.2 / Conceptual Modelling of Seasonal Energy Storage Technologies for Residential Heating in a Dutch town Best Erik Drilen, Elisabet Syverud (University of South-Eastern Norway)	Paper#18: 1.4.2 / Experience in Designing for Cyber Resiliency in Embedded DoD Systems Jennifer Barzeele (Raytheon Intelligence and Space); Kit Siu (General Electric Research); Mike Robinson, Liana Suantak, John Merems (Raytheon Missiles and Defense); Michael Durling, Abha Moitra, Baoluo Meng (General Electric Research); Patrice Williams (Raytheon Intelligence and Space); Daniel J. Prince (GE Aviation)			
12:10	12:30	11:30	12:30	16:30	17:30	17:30	18:30	21:00	22:00	23:30	0:30	0:30	1:30	1:30	2:30	Break					
US West Coast	US East Coast	UK	Europe	India	China Hongkong	Korea and Japan	Australia Sydney										President Invited Content	MBSE, Processes	FuSE	Aerpace, Defense, System Architecture/Modeling	TechOps Invited Content
9:30	10:10	12:30	13:10	17:30	18:10	18:30	19:10	22:00	22:40	0:30	1:10	1:30	2:10	2:30	3:10	Session 2 Moderator: Tom McDermott ; Panelists: Shriya Das ; Al George (Cornell); Bob Kenley (Purdue); Julian Johnson (Holitem); Cecilia Haskins (NTNU); Paper#54: 2.2.1 / A value-driven, integrated approach to Model-Based Product Line Engineering Juan Navas (Thales Corporate Engineering); Stephane Bonnet (Thales Avionics Technical Directorate); Jean-Luc Voirin (Thales Airborne Systems / Thales Technical Directorate); Hugo Guillermo Chale Gongora (Thales Corporate Engineering) Paper#20: 2.2.2 / Formulas and Guidelines for Deriving Functional System Requirements from a Systems Engineering Model John Shelton, Victoria Heisler, Kristina Sebacher (Johns Hopkins University, Applied Physics Lab) Paper#130: 2.2.3 / Is CAD A Good Paradigm for MBSE? Kaitlin Henderson, Alejandro Salado (Virginia Tech)	Paper#43: 2.3.1 / Agility in the Future of Systems Engineering (FuSE) - A Roadmap of Foundational Concepts Keith Willett (Dept of Defense); Rick Dove (Self); Alan Chudnow, Emmet Eckman (Northrop Grumman); Larri Rosser (Raytheon); Jennifer Stevens (NASA); Robin Yeman (Lockheed Martin); Michael Yokell (Raytheon)	Paper#7: 2.4.1 / Aspect-Oriented Architecting Using Architecture Frameworks James Martin (The Aerospace Corporation)	Invited Content#4: 2.5.1 / Spectacular Views of the City Jon Mooney (ACOUSTICS BY JW MOONEY LLC)		
10:15	10:55	13:15	13:55	18:15	18:55	19:15	19:55	22:45	23:25	1:15	1:55	2:15	2:55	3:15	3:55		Paper#49: 2.3.2 / Security in the Future of Systems Engineering (FuSE), a Roadmap of Foundational Concepts Rick Dove (Independent); Keith Willett (U.S. Department of Defense); Tom McDermott (Systems Engineering Research Center); Holly Dunlap (Raytheon Technologies); Delia MacNamara (Australian Government); Cory Ocker (Raytheon Technologies)	Paper#137: 2.4.2 / UAF (Unified Architecture Framework) Based MBSE (UBM) Method to build a System of Systems Model Lalitha Abhaya (Airbus Defence and Space)	Invited Content#TechOps#3: 2.5.2 / S.O.S. for FSS: The need for Systems of Systems (SoS) Thinking per Financial Services Architectures, both Current and Emerging. Gina Guillaume-Joseph, Bradford Leigh		
11:00	11:40	14:00	14:40	19:00	19:40	20:00	20:40	23:30	0:10	2:00	2:40	3:00	3:40	4:00	4:40		Paper#45: 2.3.3 / Security as a Functional Requirement in the Future of Systems Engineering Keith Willett (U.S. Department of Defense)	Paper#6: 2.4.3 / Enterprise Architecture Process Guide for the Unified Architecture Framework (UAF) James Martin (The Aerospace Corporation); David O'Neil (SAIC)	Invited Content#TechOps#4: 2.5.3 / Leading the Way to Diversity, Equity, and Inclusion in Systems Engineering Alan Harding, Alice Squires		
14:40	15:00	14:40	15:10	19:40	20:10	20:40	21:10	0:10	0:40	2:40	3:10	3:40	4:10	4:40	5:10	Break					
US West Coast	US East Coast	UK	Europe	India	China Hongkong	Korea and Japan	Australia Sydney										Systems Competency/ Teaching/Training	MBSE	System Security, Defense	TechOps Invited Content	
12:10	12:50	15:10	15:50	20:10	20:50	21:10	21:50	0:40	1:20	3:10	3:50	4:10	4:50	5:10	5:50	Session 3 Paper#76: 3.1.1 / Developing a Topic Network of Published Systems Engineering Research Rudolph Oosthuizen (CSIR) Presentation#7: 3.1.2 / Systems Engineering Professional Certification Standard Ray Hentzschel (Systems Engineering Society of Australia)	Presentation#3: 3.2.1 / How do we know that we know? - A Model-Based-Knowledge-Management Concept supporting digital effectiveness Robert Nilsson (Volvo Cars Corporation)	Panel#8: 3.3 / Heuristics for Systems Engineering: Useful or Dangerous? Outdated or Enduring? Moderator: Dorothy McKinney (Advanced Systems Thinking, Inc.); Panelists: Gan Wang (BAE Systems); Robert Halligan (PPI); Peter Brook (Dashwood Systems Engineering); Sarah Sheard (Carnegie Mellon University (retired)); Chandru Mirchandani (Leidos); Scott Jackson (Burnham Systems Research);	Paper#47: 3.4.1 / Insights for Systems Security Engineering from Multilayer Network Models Adam Williams, Gabriel Birch, Susan Caskey, Elizabeth Fleming, Thushara Gunda, Thomas Adams, Jamie Wingo (Sandia National Laboratories)	Invited Content#TechOps#5: 3.5 / Panel: SysML 1.7 to 2.0 Daniel Siegl	
12:55	13:35	15:55	16:35	20:55	21:35	21:55	22:35	1:25	2:05	3:55	4:35	4:55	5:35	5:55	6:35		Presentation#16: 3.2.2 / Providing truth, trust and traceability to MBSE Adriana D'Souza (Airbus); Larry Gurule (CMPIC / I-Infusion / SAE SMC/G33); David Hetherington (Systems Strategy, inc); Aleksander Przybylo (Boeing)	Paper#98: 3.4.2 / STPA-Sec Analysis for the DevSecOps Reference Design Ryyan Reule, Brynn Feighery (U.S. Air Force Academy); Mark Winstead, Daryl Hild, Will Barnum (MITRE); Martin Span (U.S. Air Force Academy)			
14:40	15:00	16:35	16:45	21:35	21:45	22:35	22:45	2:05	2:15	4:35	4:45	5:35	5:45	6:35	6:45	Break					
13:45	14:30	16:45	17:30	21:45	22:30	22:45	23:30	2:15	3:00	4:45	5:30	5:45	6:30	6:45	7:30	Sponsors Track					

IS2021 Schedule

Tuesday at IS 2021

Start time	End time	Start time	End time	Start time	End time	Start time	End time	Start time	End time	Start time	End time	Start time	End time	Start time	End time	Track 1	Track 2	Track 3	Track 4	Track 5	
US West Coast	US East Coast	UK	Europe	India	China Hongkong	Korea and Japan	Australia Sydney														
04:00	04:45	07:00	07:45	12:00	12:45	13:00	13:45	16:30	17:15	19:00	19:45	20:00	20:45	21:00	21:45	Sponsors Track					
05:45	06:00	08:45	09:00	13:45	14:00	14:45	15:00	18:15	18:30	20:45	21:00	21:45	22:00	22:45	23:00	Break					
US West Coast	US East Coast	UK	Europe	India	China Hongkong	Korea and Japan	Australia Sydney														
05:00	06:30	08:00	09:30	13:00	14:30	14:00	15:30	17:30	19:00	20:00	21:30	21:00	22:30	22:00	23:30	Keynote	Keynote - Plenary#K2: K2 / The role of architecture in achieving Society 5.0 Masayoshi Arai (Director-General, Commerce and Information Policy Bureau Ministry of Economy, Trade and Industry (METI), Government of Japan)				
06:30	7:00	09:30	10:00	14:30	15:00	15:30	16:00	19:00	19:30	21:30	22:00	22:30	23:00	23:30	0:00	Break					
US West Coast	US East Coast	UK	Europe	India	China Hongkong	Korea and Japan	Australia Sydney									Autonomous Systems, Artificial Intelligence/ Machine Learning	Industry 4.0 & Society 5.0, Social/ Sociotechnical and Economic Systems	Oil & Gas		Infrastructure, Needs and Requirements Definition, City Planning	
7:00	7:40	10:00	10:40	15:00	15:40	16:00	16:40	19:30	20:10	22:00	22:40	23:00	23:40	0:00	0:40	Paper#110: 4.1.1 / Framework for Formal Verification of Machine Learning Based Complex System-of-System Ramakrishnan Raman, Nikhil Gupta, Yogananda Jeppu (Honeywell Technology Solutions Lab)	Presentation#14: 4.2.1 / Conflict is your friend- Managing healthy conflict in the systems engineering workplace Zane Scott (Vitech)	Paper#4: 4.3.1 / Developing domain-specific AI-based tools to boost cross-enterprise knowledge reuse and improve quality Sajjad Sarwar (MHWirth); Cecilia Haskins (NTNU / USN)	Panel#3: 4.4 / A Framework for Understanding Systems Engineering Principles and Heuristics Moderator:Peter Brook (Dashwood Systems Engineering); Panelists: Michael Pennotti (Stevens Institute of Technology); David Rousseau (Centre for Systems Philosophy);	Paper#88: 4.5.1 / Requirement Patterns in the Construction Industry Ron Claghorn, Hussam Shubayli (Saudi Arabia Bechtel Company)	
7:45	8:25	10:45	11:25	15:45	16:25	16:45	17:25	20:15	20:55	22:45	23:25	23:45	0:25	0:45	1:25	Paper#132: 4.1.2 / A Systems Engineering Approach to the Design and Education of a Robotic Baby Hanqing Zhu (Georgia Institute of Technology); Eric Feron (King Abdullah University of Science and Technology)	Presentation#15: 4.2.2 / Making Your Case- Negotiation and persuasion for the systems engineer Zane Scott (Vitech)	Paper#64: 4.3.2 / How can simplified requirements affect project efficiency – A case study in oil and gas Eirik Fallro, Kristin Falk (University of South-Eastern Norway)	Paper#95: 4.5.2 / Demonstrating the Value of Systems Engineering as the Professional Standard of Care Oliver Hoehne (WSP USA)		
8:30	9:30	11:30	12:30	16:30	17:30	17:30	18:30	21:00	22:00	23:30	0:30	0:30	1:30	1:30	2:30	Break					
US West Coast	US East Coast	UK	Europe	India	China Hongkong	Korea and Japan	Australia Sydney									President Invited Content	Industry 4.0 & Society 5.0, Social/ Sociotechnical and Economic Systems, Information Management	Oil & Gas, Maritime	Systems Sciences, Systems Thinking	Modeling/Simulation/Analysis, Resilience	
9:30	10:10	12:30	13:10	17:30	18:10	18:30	19:10	22:00	22:40	0:30	1:10	1:30	2:10	2:30	3:10	Invited Content#Inv#2: 5.1 / DE meets SE: Building a Joint Culture Moderator:Troy Peterson ; Panelists: Philomena Zimmerman ;	Presentation#20: 5.2.1 / System Hierarchy Structures for Sustainable Development Goals Maya Narayan, Anshul Agrawal (Holon Perspectives)	Paper#2: 5.3.1 / Assessing a supplier to the offshore oil and gas industry following a worldwide pandemic Mo Mansouri, Kristian Frederik Wedel Jarlsberg (University of South-Eastern Norway)	Presentation#25: 5.4.1 / Systems Engineering – A Matter of Perspectives David Long (Vitech Corporation)	Paper#24: 5.5.1 / Employing a Model Based Conceptual Design Approach to Design for Resilience David Flanigan (The Johns Hopkins University Applied Physics Laboratory); Kevin Robinson (Shoal Group)	
10:15	10:55	13:15	13:55	18:15	18:55	19:15	19:55	22:45	23:25	1:15	1:55	2:15	2:55	3:15	3:55	Paper#37: 5.2.2 / Unlocking the power of big data within the early design phase of the new product development process. Haytham B. Ali (University of South-Eastern Norway (USN)); Fredrik H. Helgesen (University of South-Eastern Norway); Kristin Falk (University of South-Eastern Norway (USN))	Paper#109: 5.3.2 / Implementation of tailored requirements engineering and management principles in a supplier to the oil and gas industry Jenny Camilla Hårstadsveen, Satyanarayana Kokkula (University of South-Eastern Norway)	Paper#128: 5.4.2 / An Assessment of the Adequacy of Common Definitions of the Concept of System Alejandro Salado, Adityau, Kulkarni (Virginia Tech)	Paper#16: 5.5.2 / Evaluation of Requirements Management Processes Utilizing System Modeling Language (SysML) Executable Models Tami Katz (Ball Aerospace)		
11:00	11:40	14:00	14:40	19:00	19:40	20:00	20:40	23:30	0:10	2:00	2:40	3:00	3:40	4:00	4:40	Paper#79: 5.2.3 / Opportunities and Challenges of Sociotechnical Systems Engineering John Gill (Scientific System Company, Incorporated); Avigdor Zonnenshain (Neaman Institute for National Policy Research); Danielle Lamoureux (MS Data Science)	Paper#75: 5.3.3 / Application of A3 Architecture Overviews in Subsea Front-End Engineering Studies: A Case Study Remi Haugland, Siv Engen (University of South-Eastern Norway)	Paper#106: 5.4.3 / Systems Thinking: A Critical Skill for Systems Engineers Charles Keating (Old Dominion University); Polinpapilinho Katina (University of South Carolina Upstate); Raed Jaradat (Mississippi State University); Richard Hodge (DrRichardHodge.com)	Paper#102: 5.5.3 / Resilience Requirements Patterns John Britis, Michael McEvilly, Michael Pennock (The MITRE Corporation)		
11:40	12:10	14:40	15:10	19:40	20:10	20:40	21:10	0:10	0:40	2:40	3:10	3:40	4:10	4:40	5:10	Break					
US West Coast	US East Coast	UK	Europe	India	China Hongkong	Korea and Japan	Australia Sydney									MBSE		Risk and Opportunity Management	Social Systems/ Resilience	Systems Modeling/ Infrastructure Management	
12:10	12:50	15:10	15:50	20:10	20:50	21:10	21:50	0:40	1:20	3:10	3:50	4:10	4:50	5:10	5:50	Paper#42: 6.1.1 / From UAF to SysML: Transitioning from System of Systems to Systems Architecture Aurelijus Morkevicius, Aiste Aleksandraviciene, Gintare Krisciuniene	Panel#7: 6.2 / Solving the Digital Engineering Information Exchange Challenge Moderator:Terri Chan (Boeing Commercial Airplanes); Panelists: Philomena Zimmerman (US DoD); Celia Tseng (Raytheon); Sean McGervey (John Hopkins University Applied Physics Laboratory); Tamara Hambrick (Northrop Grumman);	Paper#30: 6.3.1 / The risk maturity model: a new tool for improved risk management and feedback Brede Aas-Haug (Norwegian DoD); Cecilia Haskins (NTNU / USN)	Paper#55: 6.4.1 / Dealing with COVID-19 Pandemic in Complex Societal System for Resilience Study: A Systems Approach Bijun Wang, Mo Mansouri (Stevens Institute of Technology)	Presentation#23: 6.5.1 / A Systems Theory Approach to Building Management Jonathan Coburn (KBR)	
12:55	13:35	15:55	16:35	20:55	21:35	21:55	22:35	1:25	2:05	3:55	4:35	4:55	5:35	5:55	6:35	Paper#99: 6.1.2 / Verification and Validation of SysML Models Myron Hecht, Jaron Chen (The Aerospace Corporation)		Paper#41: 6.3.2 / Predicting failure events from crowd-derived inputs: schedule slips and missed requirements Georgios Georgalis, Karen Marais (Purdue University)	Paper#9: 6.4.2 / Why Systems Engineers May Have an Edge When It Comes to Personal Resilience Heidi Hahn (New Mexico Tech)		
14:40	15:00	16:35	16:45	21:35	21:45	22:35	22:45	2:05	2:15	4:35	4:45	5:35	5:45	6:35	6:45	Break					
13:45	14:30	16:45	17:30	21:45	22:30	22:45	23:30	2:15	3:00	4:45	5:30	5:45	6:30	6:45	7:30	Time with the President					

IS2021 Schedule

Wednesday at IS 2021

Start time	End time	Start time	End time	Start time	End time	Start time	End time	Start time	End time	Start time	End time	Start time	End time	Start time	End time	Track 1	Track 2	Track 3	Track 4	Track 5	
US West Coast	US East Coast	UK	Europe	India	China Hongkong	Korea and Japan	Australia Sydney														
04:00	04:45	07:00	07:45	12:00	12:45	13:00	13:45	16:30	17:15	19:00	19:45	20:00	20:45	21:00	21:45	Sponsors Track					
05:45	06:00	08:45	09:00	13:45	14:00	14:45	15:00	18:15	18:30	20:45	21:00	21:45	22:00	22:45	23:00	Break					
US West Coast	US East Coast	UK	Europe	India	China Hongkong	Korea and Japan	Australia Sydney														
05:00	06:30	08:00	09:30	13:00	14:30	14:00	15:30	17:30	19:00	20:00	21:30	21:00	22:30	22:00	23:30	Keynote	Keynote - Plenary#K3: K3 / How systems engineering made solar cars a reality Lex Hoefsloot (Co Founder of Lightyear)				
06:30	7:00	09:30	10:00	14:30	15:00	15:30	16:00	19:00	19:30	21:30	22:00	22:30	23:00	23:30	0:00	Break					
US West Coast	US East Coast	UK	Europe	India	China Hongkong	Korea and Japan	Australia Sydney									Social/Sociotechnical and Economic Systems	System Architecture/Design Definition, System Requirements	Measurement and Metrics	System Requirements/ Product Line Engineering		
7:00	7:40	10:00	10:40	15:00	15:40	16:00	16:40	19:30	20:10	22:00	22:40	23:00	23:40	0:00	0:40	Session 7	Paper#27: 7.1.1 / Putting the Social in Systems Engineering: An Overview and Conceptual Development Erika Palmer (CIRIS-Centre for Interdisciplinary Research in Space); Donna Rhodes (Massachusetts Institute of Technology); Michael Watson (NASA Marshall Space Flight Center); Cecilia Haskins (NTNU / USN); Camilo Olaya (Universidad de los Andes); Ian Presland (Charterhouse Systems Limited); Knut Fossum (CIRIS-Centre for Interdisciplinary Research in Space)	Paper#62: 7.2.1 / A Framework for Identifying and Managing New Operational Requirements during Naval Vessel Batch-Building Programs Brett Morris (Naval Group)	Presentation#30: 7.3.1 / Defining a Measurement Framework for Digital Engineering Joseph Bradley (Main Sail, LLC)	Paper#11: 7.4.1 / Innovative Approaches to Superset Asset Templates using Feature-Based Product Line Engineering June Kobayashi, Steve Way, Jonathan Krauss (Northrop Grumman Space Systems); Paul Clements (BigLever Software, Inc.)	Panel#1: 7.5 / The MBSE Futurist's Dilemma: Diffusing systems engineering practices in an AI dominated era Moderator:Ramakrishnan Raman (Honeywell); Panelists: Stephen Piggott (Canadian Space Agency); Vincent Arould (Hensoldt); Juan Navas (Thales Group); Hany Fawzy (Canadian Space Agency);
7:45	8:25	10:45	11:25	15:45	16:25	16:45	17:25	20:15	20:55	22:45	23:25	23:45	0:25	0:45	1:25	Paper#32: 7.1.2 / Social Science Solutions for the Systems Engineer: What's Needed Charlotte Dunford (Rolls Royce); Erika Palmer (CIRIS-Centre for Interdisciplinary Research in Space); Richard Beasley (Rolls Royce)	Paper#115: 7.2.2 / An Elaboration of Service Views within the UAF Lars-Olof Kihlström (Syntell AB); Matthew Hause (SSI)	Paper#124: 7.3.2 / Measuring performance and identifying metrics of machine protection systems for particle accelerators Szandra Kövecses, Annika Nordt (European Spallation Source ERIC); Dag Bergsjö (Chalmers University of Technology)	Presentation#29: 7.4.2 / Ushering in a New Era for Feature-based Product Line Engineering with the ISO/IEC 26580 International Standard Charles Krueger (BigLever Software)		
8:30	9:30	11:30	12:30	16:30	17:30	17:30	18:30	21:00	22:00	23:30	0:30	0:30	1:30	1:30	2:30	Break					
US West Coast	US East Coast	UK	Europe	India	China Hongkong	Korea and Japan	Australia Sydney									President Invited Content	Infrastructure, Life-Cycle Costing and/or Economic Evaluation	MBSE	Systems Thinking, Aerospace	Competency/ Teaching/ Training	
9:30	10:10	12:30	13:10	17:30	18:10	18:30	19:10	22:00	22:40	0:30	1:10	1:30	2:10	2:30	3:10	Session 8	Invited Content#Inv#3: 8.1 / Using Systems Thinking to Add Value in these Uncertain Times Moderator:Charlotte Dunford ; Panelists: Gary Smith (ISSS / Airbus); Jawahar Bhalla ; Patrick Godfrey ; Suja Joseph-Malherbe ;	Paper#46: 8.2.1 / Network Rail's Systems Integration for Delivery (SI4D) Framework Derek Price (Network Rail)	Paper#123: 8.3.1 / Return on Investment in Model-Based Systems Engineering Software Tools James Duffy, Jingyao Feng, Robert Combs, James Richardson (George Mason University)	Paper#114: 8.4.1 / Investigation of Remote Work for Aerospace Systems Engineers Eric van Velzen, Alison Olechowski (University of Toronto)	Paper#105: 8.5.1 / Systems Thinking in Socially Engaged Design Settings: What Can We Learn? Chanel Beebe, C. Robert Kenley (Purdue University)
10:15	10:55	13:15	13:55	18:15	18:55	19:15	19:55	22:45	23:25	1:15	1:55	2:15	2:55	3:15	3:55	Paper#85: 8.2.2 / Using Models and Simulation for Concept Analysis of Electric Roads Lars-Olof Kihlstrom (Syntell AB); Matthew Hause (Systems Solutions Inc (SSI)); Andreas Kihlstrom (BRP Systems AB); Ida Karlsson, Bilin Chen (Syntell AB)	Paper#57: 8.3.2 / Application of natural language processing for systematic requirement management in model-based systems engineering Michael Riesener, Christian Döle, Annika Kristin Becker (Laboratory for Machine Tools and Production Engineering (WZL), RWTH Aachen); Sofia Gorbacheva (RWTH Aachen University); Eric Rebertisch (MIT Center for Sociotechnical Systems); Günther Schuh (Laboratory for Machine Tools and Production Engineering (WZL), RWTH Aachen)	Paper#56: 8.4.2 / From Brownfield to Greenfield Development – Understanding and Managing the Transition Johanna Axehill, Erik Herzog, Johan Tingström (Saab Aeronautics); Marie Bengtsson (Linköping University)	Paper#28: 8.5.2 / The value of trade-off studies for student projects Håkon Kindem (Orbit NTNU); Cecilia Haskins (NTNU)		
11:00	11:40	14:00	14:40	19:00	19:40	20:00	20:40	23:30	0:10	2:00	2:40	3:00	3:40	4:00	4:40	Paper#89: 8.2.3 / Solar Energy Investment Framework for Real Estate in Norway – a Case Study in Systems Engineering Elisabet Syverud, Karsten Hofstad Bak (University of South-Eastern Norway)	Presentation#28: 8.3.3 / MBSE Components in the Supply Chain, Spring 2021 Student Capstone Project David Hetherington (System Strategy, Inc); Steven Dam (SPEC Innovations)	Paper#94: 8.4.3 / The Systems Engineering Conundrum: Where is the Engineering? Charles Wasson (Wasson Strategics, LLC)	Paper#117: 8.5.3 / The Evolution of HELIX: A Competency Model for Complex Problem Solving Tom McDermott, Nicole Hutchison (Stevens Institute of Technology); Ruth Crick (Jearni Sciences)		
11:40	12:10	14:40	15:10	19:40	20:10	20:40	21:10	0:10	0:40	2:40	3:10	3:40	4:10	4:40	5:10	Break					
US West Coast	US East Coast	UK	Europe	India	China Hongkong	Korea and Japan	Australia Sydney									Systems Engineering Lifecycle	Systems/ Software Architecture	Product Line Engineering	System Safety, Aerospace		
12:10	12:50	15:10	15:50	20:10	20:50	21:10	21:50	0:40	1:20	3:10	3:50	4:10	4:50	5:10	5:50	Session 9	Presentation#13: 9.1.1 / 6 Vs and 3 Ts of Systems Engineering David Long (Vitech)	Paper#13: 9.2.1 / A Guide for Systems Engineers to Finding Your Role in 21st-Century Software-Dominant Organizations Sarah Sheard (Carnegie Mellon University (Retired)); Mickael Bouyaud (World Line); Macaulay Osaisai (L3Harris Technologies); Jeannine Sivi (SDLC Partners); Kenneth Nidiffer (George Mason University)	Paper#31: 9.3.1 / Feature-based Product Line Engineering: An Essential Ingredient in Agile Acquisition Rowland Darbin (General Dynamics Mission Systems); Randy Pitz (The Boeing Company); Matthew Taylor, James Teaff (Raytheon Technologies Intelligence and Space); Bobbi Young (Raytheon Technologies); Beth Wilson (INCOSE Security Systems Engineering Working Group); David Hartley (General Dynamics Mission Systems); Paul Clements (BigLever Software, Inc.)	Paper#53: 9.4.1 / Integrating Safety Analysis into Model-Based Systems Engineering for Aircraft Systems: A Literature Review and Methodology Proposal Kimberly Lai (University of Toronto); Thomas Robert, David Shindman (Safran Landing Systems); Alison Olechowski (University of Toronto)	Panel#9: 9.5 / Investigating interdisciplinary systems approaches for health care access Moderator:Shamsnaz Bhada (Worcester Polytechnic Institute); Panelists: Leonard Bruce ; Alex Agloro (Arizona State University);
12:55	13:35	15:55	16:35	20:55	21:35	21:55	22:35	1:25	2:05	3:55	4:35	4:55	5:35	5:55	6:35	Presentation#17: 9.1.2 / Economic Analysis of Unmanned Aerial Vehicle (UAV) Platform Options Abdul Rahman El Fouly (The Boeing)	Paper#78: 9.2.2 / A Method to Visualize the Relationship between Regulations and Architectural Constraints Yoshiko Ohno, Seiko Shirasaka (Graduate School of System Design and Management, KEIO University)	Paper#21: 9.3.2 / How Missile Engineering is Taking Product Line Engineering to the Extreme at Raytheon Bobbi Young, Tom Sanderson, Matt Thurman, Jeffrey Turpin (Raytheon Missiles & Defense); Elizabeth O'Keefe (DZYNE Technologies); Paul Clements (BigLever Software, Inc.)	Paper#8: 9.4.2 / You Don't Save Money by Doing Less Testing – You Save Money by Doing More of the Right Testing! Andrew Pickard (Rolls-Royce Corporation); Richard Beasley, Andrew Nolan (Rolls-Royce plc)		
14:40	15:00	16:35	16:45	21:35	21:45	22:35	22:45	2:05	2:15	4:35	4:45	5:35	5:45	6:35	6:45	Break					
13:45	14:30	16:45	17:30	21:45	22:30	22:45	23:30	2:15	3:00	4:45	5:30	5:45	6:30	6:45	7:30	Sponsors Track					

IS2021 Schedule

Thursday at IS 2021

Start time	End time	Start time	End time	Start time	End time	Start time	End time	Start time	End time	Start time	End time	Start time	End time	Start time	End time	Track 1	Track 2	Track 3	Track 4	Track 5	
US West Coast	US East Coast	UK	Europe	India	China Hongkong	Korea and Japan	Australia Sydney														
04:30	05:15	07:30	08:15	12:30	13:15	13:30	14:15	17:00	17:45	19:30	20:15	20:30	21:15	21:30	22:15	Sponsors Track					
05:15	05:30	08:15	08:30	13:15	13:30	14:15	14:30	17:45	18:00	20:15	20:30	21:15	21:30	22:15	22:30	Break					
US West Coast	US East Coast	UK	Europe	India	China Hongkong	Korea and Japan	Australia Sydney														
05:30	06:10	08:30	09:10	13:30	14:10	14:30	15:10	18:00	18:40	20:30	21:10	21:30	22:10	22:30	23:10	Session 10	Autonomous Systems	Automotive	Needs and Requirements definition, Risk and Opportunity Management	Enterprise SE	
																	Presentation#22: 10.1.1 / System of Systems Modeling to empower decision makers in drone based services - an application in Agriculture	Paper#131: 10.2.1 / Towards a Software Defined Truck Subhojeet Mukherjee, Jeremy Daily (Colorado State University)	Paper#67: 10.3.1 / Idea Development Method, Applying Systems Design Thinking in a Very Small Entity Tommy Langen, Elisabet Syverud (University of South-Eastern Norway)	Presentation#27: 10.4.1 / Why Engineers Should Think More Like Marketers (Sometimes) Barclay Brown (Raytheon Technologies); Honor Lind (Hart Initiative Inc.)	Panel#4: 10.5 / Human-AI Teaming: A Human Systems Integration Perspective Moderator: Guy Andre Boy (CentraleSupélec (Paris Saclay University) & ESTIA Institute of Technology); Panelists: Nancy Cooke (Arizona State University); Michael Boardman (Ministry of Defence); Avigdor Zonnenshain (TECHNION); Ido Lev-Ran (RAFAEL); Mica R. Endsley (SA Technologies);
06:15	06:55	09:15	09:55	14:15	14:55	15:15	15:55	18:45	19:25	21:15	21:55	22:15	22:55	23:15	23:55		Presentation#11: 10.1.2 / Safety Engineering of Semi-Autonomous Cars Riya Shah, Amrendra Kumar (Mahindra Electric Mobility Limited (Mahindra and Mahindra group))	Paper#81: 10.2.2 / A Concept for a Digital Thread based on the Connection of System Models and Specific Models Matthias Bajzek, Clemens Faustmann, Daniel Krems, Philipp Kranabill, Hannes Hick (Graz University of Technology)	Presentation#5: 10.3.2 / The Necessity of Systems Engineering for Nuclear Power Plant Deployment Kent Welter (NuScale Power, LLC)	Presentation#9: 10.4.2 / Delighting your client as a Systems Engineering consultant Duncan Kemp (Ministry of Defence); Meaghan Oneil (Cambridge Consultants)	
7:00	7:30	10:00	10:30	15:00	15:30	16:00	16:30	19:30	20:00	22:00	22:30	23:00	23:30	0:00	0:30	Break					
US West Coast	US East Coast	UK	Europe	India	China Hongkong	Korea and Japan	Australia Sydney														
7:30	8:10	10:30	11:10	15:30	16:10	16:30	17:10	20:00	20:40	22:30	23:10	23:30	0:10	0:30	1:10	Session 11	President Invited Content	Aerospace, Needs and Requirements definition	Biomed/Healthcare/Social Services	Enterprise SE	Modeling/Simulation/Analysis, Human System Integration
																	Invited Content#Inv#4: 11.1 / The next Systems Challenge: Developing resilient, effective, inclusive, sustainable societal systems of systems Moderator: Anne O'Neil (Anne O'Neil Consultants); Panelists: Brian Collins; Duncan Kemp; Jim Bentley (New South Wales (NSW) Water Sector, NSW Department of Planning, Industry and Environment); Dr. Kirsten MacAskill (University of Cambridge); Dr. Catherine Tilley (King's College London);	Presentation#12: 11.2.1 / Towards an Integrated Approach of Systems Behavior Modeling and Specification. Jean Duprez (Airbus Operations SAS); Raphael Faudou (Samares Engineering)	Paper#51: 11.3.1 / Developing a Model Based Systems Engineering Architecture for Defense Wearable Technology Tara Sarathi, Jillian Cyr, Richard DeLaura, James Balcius, Paula Collins, Michael Shatz (MIT Lincoln Laboratory)	Paper#38: 11.4.1 / Product portfolio mapping used to structure a mature sub-system with large variation - A case study Arne Odin Sundet, Satyanarayana Kokkula, Gerrit Muller, Elisabet Syverud (University of South-Eastern Norway)	Paper#29: 11.5.1 / Analyzing Standard Operating Procedures Using Model-based System Engineering Diagrams Jomana Bashatah, Lance Sherry (George Mason University); Steve Dam, Lauren Flenniken, Patrick Hartmann, Tom Harold (SPEC Innovations)
8:10	8:55	11:10	11:55	16:10	16:55	17:10	17:55	20:40	21:25	23:10	23:55	0:10	0:55	1:10	1:55		Presentation#24: 11.2.2 / Designing Systems by Drawing Pictures and Telling Stories Barclay Brown (Raytheon Technologies)	Presentation#1: 11.3.2 / Using Heuristics to Refine the System Physical Architecture Jose L. Fernandez (Independent Consultant); Juan Antonio Martinez, Efrén Díez (Universidad de Alcala)	Presentation#26: 11.4.2 / Practical demonstration of a highly functional system-centric digital thread Tim Keer, Pawel Chadzynski (Aras Corp.)	Paper#101: 11.5.2 / Ontology-Based search engine for simulation models from their related system function Sara Mejdal (Quartz Supméca/INSA Centre Val de Loire); Olivia Penas (Quartz Supméca); Romain Barbedienne (IRT SystemX); Régis Plateaux (Quartz Supméca); Mathieu Bisquay, Jean-Patrick Brunet (IRT SystemX)	
9:00	9:40	12:00	12:40	17:00	17:40	18:00	18:40	21:30	22:10	0:00	0:40	1:00	1:40	2:00	2:40	Presentation#21: 11.2.3 / Integrating MBSE and Product Lifecycle Management Kevin Sweeney (PTC Software)	Paper#103: 11.3.3 / The Benefits of Enhanced Contact Tracing and Quarantine to Resume and Maintain College-Campus Operations: An Agent-Based Probabilistic Simulation Analysis Jomana Bashatah, Lance Sherry, Amira Roess (George Mason University)	Paper#65: 11.4.3 / Application of T-shaped engineering skills in complex multidisciplinary projects Ida Kristin Trogstad, Satya Kokkula (University of South-Eastern Norway); Joris Van Den Aker (ESI (TNO))	Presentation#2: 11.5.3 / Utilizing a Human Readiness Level (HRL) Scale to Promote Effective System Integration Benjamin Schwartz (Engineering For Humans)		
9:40	10:30	12:40	13:30	17:40	18:30	18:40	19:30	22:10	23:00	0:40	1:30	1:40	2:30	2:40	3:30	Break					
US West Coast	US East Coast	UK	Europe	India	China Hongkong	Korea and Japan	Australia Sydney														
10:30	11:10	13:30	14:10	18:30	19:10	19:30	20:10	23:00	23:40	1:30	2:10	2:30	3:10	3:30	4:10	Session 12	Technical Leadership	System Integration, Measurement and Metrics, Agile Systems Engineering	System Verification/ Testing	Enterprise SE	
																	Paper#119: 12.1.1 / Technical Leadership of Virtual and Remotely Distributed Teams Francesco Dazzi (Cherenkov Telescope Array Observatory gGmbH); Mark McKelvin (The Aerospace Corporation); Elena Gallego Palacios (Thales Nederland); Sean McCoy (Trame Technologies); Patrick Keen (Lockheed Martin Space); Allison Weigel (Toray Composite Materials America, Inc.); Lisa Ziliox (BAE Systems)	Paper#74: 12.2.1 / Enhancing Enterprise Architecture with Resilience Perspective Victoria Jnitova (UNSW@ADFA); Mahmoud Elatmaneshnik (UNISA); Keith Joiner, Elizabeth Chang (UNSW@ADFA)	Paper#34: 12.3.1 / Challenges in Detecting Emergent Behavior in System Testing Kent Aleksander Kjeldaa, Rune Andre Haugen, Elisabet Syverud (University of South-Eastern Norway)	Presentation#8: 12.4.1 / How to get the most out of your Systems Engineering consultants Duncan Kemp (Ministry of Defence); Meaghan Oneil (Cambridge Consultants)	
11:15	11:55	14:15	14:55	19:15	19:55	20:15	20:55	23:45	0:25	2:15	2:55	3:15	3:55	4:15	4:55	Paper#80: 12.2.2 / A Metrics Framework to Facilitate Integration of Disaggregated Software Development Stephen Cook (Shoal Group Pty Ltd and The University of Adelaide); Ashok Samalam (Shoal Group Pty Ltd); Mark Unewisse (Defence Science and Technology Group)	Presentation#31: 12.3.2 / From Systems to Silicon: MBSE-Enabled Digital Electronics Verification Lisa Murphy (Siemens Digital Industries Software); Mark Malinoski (Siemens EDA); Shashank Alai (Siemens Digital Industries Software, Inc.); Ahmed Hamza (Siemens EDA)	Presentation#18: 12.4.2 / Am i doing the right job and am i doing the job right? Jawahar Balla (JB Engineering Systems)			
12:00	12:30	15:00	15:30	20:00	20:30	21:00	21:30	0:30	1:00	3:00	3:30	4:00	4:30	5:00	5:30	Break					
US West Coast	US East Coast	UK	Europe	India	China Hongkong	Korea and Japan	Australia Sydney														
12:30	13:30	15:30	16:30	20:30	21:30	21:30	22:30	1:00	2:00	3:30	4:30	4:30	5:30	6:30		Plenary	Keynote - Plenary#PresidentPanel: K4.1 / Presidents' Panel: Accelerating through Adversity – Back to the Future! Moderator: Marilee Wheaton (INCOSE President Elect); Panelists: Donna Rhodes (2000); David Long (2014-2015); Alan Harding (2016-2017); Kerry Lunney (2020-2021);				
13:30	14:00	16:30	17:00	21:30	22:00	22:30	23:00	2:00	2:30	4:30	5:00	5:30	6:00	6:30	7:00		Keynote - Plenary#: K4.2 / Closing Address				