



The 73rd Annual Reliability and Maintainability Symposium

DRAFT Program Matrix

Time	#	Track A	Track B	Track C	Track D	Track E	Track F	Date
08:30 - 10:00		General Chair's Welcome & Keynote (Location: TBD Ballroom)						Monday January 25
10:15 - 12:15	1	Introduction to Probability Models in Reliability & Maintainability ***Core Tutorial***	AI-Assisted Reliability Engineering: From Fundamentals to Implementation	Autonomous Systems	Developing the Next Talent	R&M Applications in Aerospace - 1	CRE - BoK Topic #1 (Reliability Fundamentals)	
13:30 - 15:30	2		Introduction to Modeling and Predicting System Resilience	Accelerated Life Testing - 1	R&M in the Medical Industry	Artificial Intelligence and Machine Learning - 1	CRE - BoK Topic #2 (Risk Management)	
15:45 - 17:45	3	"Introduction to R&M Management ***Core Tutorial****"	IEEE Recommended Practices for Software Reliability	Reliability Growth Analysis	R&M Applications in Health Care	Design Optimization Using R&M Techniques	CRE - BoK Topic #3 (Probability & Statistics for Reliability)	
15:00 - 17:00		Exhibits Open (Location: TBD)						
07:45 - 08:00		General Chair's Corner (Location: TBD)						Tuesday January 26
09:00 - 19:00		Exhibits Open (Location: TBD)						
08:00 - 10:00	4	Introduction to Life Data Analysis ***Core Tutorial***	Artificial Intelligence for Reliability Engineering, Maintenance and Risk Assessment	Accelerated Life Testing - 2	R&M in the Electric Power Industry	Artificial Intelligence and Machine Learning - 2	CRE - BoK Topic #4 (Reliability, Planning, Testing, and Modeling)	
10:15 - 12:15	5		Time Series Foundation Models for Prognostics and Health Management	Reliability Modeling - 1	Building Resilient Systems for a Circular Future	Maintenance Models and Methodologies	CRE - BoK Topic #5 (Life-Cycle Reliability)	
13:30 - 15:30	6	Understanding and Applying Fundamentals of FMEAs ***Core Tutorial***	Monte Carlo for Reliability Applications	Prognostics and Health Management - 1	System Safety Analysis	Data Analytics	CRE - Open Q&A	
15:45 - 17:45	7	Introduction to Fault Tree Analysis ***Core Tutorial***	From Legacy Systems to AI-Enabled FMEA: A Structured MBSE-Driven Approach	PHM				
17:45 - 19:45		Attendee/Exhibitor Reception (Location: TBD)						Wednesday January 27
07:45 - 08:00		General Chair's Corner (Location: TBD)						
09:00 - 13:00		Exhibits Open (Location: TBD)						
08:00 - 10:00	8	A (really easy) Introduction to Weibull Analysis	AI for Reliability, Availability, Maintainability, and Cost in Sustainment	FMEA	R&M Applications in Defense Systems	Reliability Testing - 1	R&M Applications in Infrastructure Management	
10:15 - 12:15		Advisory Board Panel						
13:30 - 15:30	9	From Defect Instability to System Availability: A Unified Framework for Software	Common Mistakes in Analyzing Reliability Data	Prognostics and Health Management - 2	DoW Reverse Panel:	Artificial Intelligence and Machine Learning - 3	Risk Analysis and Management	
15:45 - 17:45	10	Fractional Failure and Its Application in Reliability Engineering	Determining Right Sample Sizes for Reliability Tests: Theory and Application	Reliability Modeling - 2	DoW & Industry: R&M Challenges & Opportunities	Software Reliability (Reliable Software) - 1	R&M Management	
18:30 - 21:30		General Reception & Banquet (Location: TBD Ballroom)						Thursday January 28
07:45 - 08:00-		General Chair's Corner (Location: TBD)						
08:00 - 10:00	11	From Reliability Metrics to Target Setting and Allocation: Practical Use	AI-Driven Bayesian Templates for AIE Practices in Reliability Engineering	Economic and Life Cycle Cost Models for R&M Equipment	Life Data Analysis	Reliability Testing - 2	Human Reliability	
10:15 - 12:15	12	Design for Reliability and Testing for Products Operating in Harsh Environments	Data-Driven Risk Management for Complex Projects	Physical Reliability Models	R&M Applications in Aerospace - 2	Software Reliability (Reliable Software) - 2	Diagnostics and Testability	
12:15 - 14:15	13	Tentative Poster Session (Location: TBD)						
12:00 - 16:00		DoW - Industry R&M Engineering Roundtable - [Invite only]						
		Legend	(T) = Tutorial	(PN) = Panel	(PS) = Paper Session	(CRE) = CRE BoK Topics	Across all tracks	