DAY 3: WEDNESDAY, OCTOBER 25, 2023			
SESSIONS	**PAPER TITLE**	**AUTHORS / PANELISTS**	**STARTING TIME (Central Time)**
Session 7: AI/ML in Human Reliability Analysis and Human-Machine Interactions Co-Chairs: 1. Luca Podofillini (luca.podofillini@psi.ch) 2. Mohammad Albati (malbati2@illinois.edu) 3. Jake Mitstifer (jakehm2@illinois.edu)	A Survey of Parameterization Techniques for Bayesian Network Models for Human Reliability Analysis	Joseph O'Leary, Yunfei Zhao, Katrina Groth	8:00
	Bayesian Networks from scarce data and expert judgment: a human reliability analysis application	Luca Podofillini, Vinh Dang	8:30
	Grey-Box Digital Twins of Nuclear Power Plants	Leonardo Miqueles, Ibrahim Ahmed, Francesco Di Maio, Enrico Zio	9:00
	On Modeling Human-Digital Twin Interactions and their Safety Risk Impact in Nuclear Power Plants	Riley Fisher, Spencer Fargusson, Jake Mitstifer, John Beal, Ha Bui, Pegah Farshadmanesh, Tatsuya Sakurahara, Seyed Reihani, Ernie Kee, Zahra Mohaghegh	9:30
	Implementation of Neural Operator Learning in Digital Twin Systems	Kazuma Kobayashi, James Daniell, Dinesh Kumar, Syed Bahauddin Alam	10:00
Session 8: Risk-informed design and regulation of AI and ML technologies Co-Chairs: 1. Latonia Enos-Sylla (latonia.enos-sylla@nrc.gov) 2. Hammad Khalid (mkhalid5@illinois.edu) 3. Riley Fisher (rileyf2@illinois.edu)	Regulatory Viability of Nuclear Digital Twins	John Matrachisia, Doug Eskins, Jesse Carlson, Chris Ulmer, Bruce Lin, Raj Iyengar, Vaibhav Yadav	10:30
	A Regulatory Perspective on the Uses of Artificial Intelligence in Nuclear Applications	Matt Dennis, Alfred (Trey) Hathaway III, Jonathan Barr, Luis Betancourt	11:00
	Risk Analysis Applied to Edge Artificial Intelligence Devices in Healthcare	David M. Johnson, Lydia Malen, Erik Clemens, Bryce Flor	11:30
	Surrogate-Assisted Reliability-Based Design Optimization In A Composite Structure Under Constraints	Dinesh Kumar, Richa Verma, Kazuma Kobayashi, Syed Bahauddin Alam	12:00
Session 9: Prognostics and Health Management using AI and ML Co-Chairs: 1. Diego Mandelli (diego.mandelli@inl.gov) 2. John Beal (jabeal2@illinois.edu)	Integration of Condition-based, Diagnostic, Prognostic, and Anomaly Detection Data into Reliability Models to Support a Predictive Maintenance Context	D. Mandelli, C. Wang, V. Agarwal and L. Lin	15:00
	Digital Condition Monitoring of Nuclear Piping-Equipment Systems using Artificial Intelligence Technology	Harleen Kaur Sandhu, Saran Srikanth Bodda, Abhinav Gupta	15:30
	Data Fusion of Numerical and Textual Equipment Reliability Data: A Knowledge-Graph-based Approach	D. Mandelli, C. Wang, and J. Cogliati	16:00
	Detecting Chloride Degradation in Concrete Structures by Developing a Physics-trained Artificial Intelligence Framework	Parth Patel, Abhinav Gupta, Saran Srikanth Bodda, Harleen Kaur Sandhu	16:30
	Multi-Stage Neural Network Architecture For Improving Continuous Prediction Reliability	James Daniell, Kazuma Kobayashi, Dinesh Kumar, Souvik Chakraborty, Syed Bahauddin Alam	17:00
	From Data to Knowledge: A Case for Textual Equipment Reliability Data	C. Wang, D. Mandelli, and J. Cogliati	17:30