

DAY 1					Chairs
10.10.2023	08:00	13:00	Registration		
10.10.2023	08:45	09:15	Coffee		
10.10.2023	09:00	09:15	Welcome Note	Short introduction to the tutorials	Birgit
10.10.2023	09:15	10:45	Tutorial Session 1	Parallel tutorials Human reliability in rail context (Frederik-Alexander Adebahr) Code Generation and Automated Verification of EULYNX MBSE Artifacts (Robert Schmid)	
10.10.2023	10:45	11:00	Break		
10.10.2023	11:00	12:00	Tutorial Session 2	Parallel tutorials Risk Assessment for Driverless Train Operation on Main Lines – An Example (Jens Braband and Hendrik Schäbe) Model Checking benefits and lessons learnt for V&V (SafeRiver company)	
10.10.2023	12:00	13:30	Lunchbreak		
10.10.2023	13:30	14:00	Welcome Note	Welcome notes by Simon & Birgit	Birgit
10.10.2023	14:00	15:00	Keynote	Lydia Kaiser. Unleashing the Potential of Systems Engineering: From Theory to Practice	Birgit
10.10.2023	15:00	15:30	Break		
10.10.2023	15:30	16:00	Session 1	Ziyue Tang, Ning Zhao, Khalid Khan and Katinka Wolter. Safety analysis of Automatic Train Operation based on ETCS in main line application	Anne
10.10.2023	16:00	16:30		Lodiana Beqiri, Zeinab Bakhshi, Sasikumar Punnekkat and Antonio Cicchetti. Estimation of Remaining Useful Life for Railway Gearbox Bearings using Machine Learning.	Anne
10.10.2023	16:30	17:00		Michael Wild, Jan Steffen Becker, Günter Ehmen and Eike Möhlmann. Towards Scenario-based Certification of Highly Automated Railway Systems	Anne
10.10.2023	17:00	17:30		Giulio Masetti, Felicita Di Giandomenico and Silvano Chiaradonna. Dependability Modeling and Analysis of UPS Architectures for the Italian Railway Signaling System	Anne

DAY 2					
	08:30	09:00	Arrival		
11.10.2023	09:00	10:00	Keynote	Andreas Freese. Enterprise IT in a large organisation is a challenge. Even more challenging if the “large organisation” is Deutsche Bahn AG in the middle of the digital revolution	Thierry
11.10.2023	10:00	10:30	Session 2	Michael Leuschel and Nader Nayeri. Modelling, Visualisation and Proof of an ETCS Level 3 Moving Block System	Thierry
11.10.2023	10:30	11:00		Madhusree Banerjee, Victor Cai, Sunitha Lakshmanappa, Andrew Lawrence, Markus Roggenbach, Monika Seisenberger and Thomas Werner. A Tool-Chain for the Verification of Geographic Scheme Data	Thierry
11.10.2023	11:00	11:30		Coffeebreak	
11.10.2023	11:30	12:00	Session 3	Ehsan Poorhadi and Elena Troubitsyna. Automating an Analysis of Safety-Security Interactions for Railway Systems	Frederik
11.10.2023	12:00	12:30		Amin Fakhereldine, Mohammad Zulkernine and Dan Murdock. TrainSec: A Simulation Framework for Security Modeling and Evaluation in CBTC Networks	Frederik
11.10.2023	12:30	13:00	Posterpresentation	Short impulses from poster presenters	Frederik
11.10.2023	13:00	14:00	Lunchbreak		
11.10.2023	14:00	15:00	Workshop	Workshop	
11.10.2023	15:00	15:30	Workshop	Presentation of Workshop Results	Birgit
11.10.2023	15:30	16:00	Break		
11.10.2023	16:00	16:30	Session 4	Anne E. Haxthausen, Alessandro Fantechi, Gloria Gori, Óli Káráson Mikkelsen and Sofie-Amalie Petersen. Automated Compositional Verification of Interlocking Systems	Sascha
11.10.2023	16:30	17:00		Alexandra Halchin, Adja Ndeye Sylla, Sarah Benyagoub, Abderrahmane Feliachi, Yoann Fonteneau and Sven Leger. Integral Formal Proof : A Verification Approach to Bridge the Gap between System and Software Levels in Railway System	Sascha
11.10.2023	17:00	17:30		Gustav Zickert and Nikitas Stathatos. Halfway Generic Verification of Railway Control Systems	Sascha
11.10.2023	19:00	23:00	Dinner		

DAY 3					
	08:30	09:00	Arrival		
12.10.2023	09:00	10:00	Keynote	Aryldo Russo. Continuous research for Innovation	Simon
12.10.2023	10:00	10:30	Session 5	Alexei Iliasov, Dominic Taylor, Linas Laibinis and Alexander Romanovsky. The SafeCap trajectory: industry-driven improvement of an interlocking verification tool (Industrial Paper)	Simon
12.10.2023	10:30	11:00		Jan Gruteser, David Geleßus, Michael Leuschel, Jan Roßbach and Fabian Vu. A Formal Model of Train Control with AI-based Obstacle Detection	Simon
12.10.2023	11:00	11:30	Break		
12.10.2023	11:30	12:30	Panel discussion	In times of limited resources and an urgent need to develop the railway system further: How can we make collaboration between industry and academia more efficient? Impulse by Armando Carrillo Zanuy, Eurnex Participants: Jens Braband, Siemens Mobility GmbH Aryldo Russo, GESTE Alexander Romanowsky, The Formal Route Martin Cichon, KIT	Birgit
12.10.2023	12:30	13:00	Farewell	Farewell words by Birgit and Thierry	