Wednesday February 23, 2022

10:00am - 10:10awm	**D1W: Welcome**
10:10am - 10:30am	**D1P: Introduction and Program** Location: Virtual Chair: Michael Freitag
10:30am - 11:15am	**D1K1: Keynote by Julia Arlinghaus** Location: Virtual Chair: Michael Freitag Curse or Blessing? Risk factors of digitalization technologies in smart factories and supply chains
11:15am - 11:30am	**Coffee Break**

11:30am - 12:30pm	**D1S1T1: Supply Chain Management** Location: Virtual Chair: Hans-Dietrich Haasis Bhardwaj, Debarshee; Kinra, Aseem: How can macro logistical capabilities be assessed togeth-er with micro performance outcomes for enhancing country location decision-making? Serkowsky, Janik[1]; Kotzab, Herbert[2]; Fischer, Julia[3]: Integrating regional food manufacturers into grocery retail supply chains Navendan, Karthikeyan; Wicaksono, Hendro; Fatahi Valilai, Omid: Enhancement of Crowd Logistics Model in an E-Commerce Scenario Using Blockchain-Based Decentralized Application	**D1S1T2: Third-party Logistics and Platforms** Location: Virtual Chair: Frank Arendt Teucke, Michael Christoph[1]; Broda, Eike[2]; Freitag, Michael[1,2]: An inter-organizational digital platform for efficient container transportation Khaturia, Roshaali; Wicaksono, Hendro; Fatahi Valilai, Omid: SRP: a Sustainable Dynamic Ridesharing Platform Utilizing Blockchain Technology Veigt, Marius[1]; Steinbacher, Lennart[1]; Freitag, Michael[1,2]: Using supervised learning to predict process steps for process planning of third-party logistics	
12:30pm - 1:30pm	**Lunch Break**	
1:30pm - 2:30pm	**D1S2T1: City and Last Mile Logistics** Location: Virtual Chair: Ingrid Rügge Engelhardt, Maximilian; Seeck, Stephan; Geier, Ben: Artificial Intelligence in Urban Last Mile Logistics - Status Quo, Potentials and Key Challenges Himstedt, Barbara; Meisel, Frank: Evaluation of combined distribution systems for city logistics Koleva, Simona; Chankov, Stanislav: The Impact of the COVID-19 Pandemic on E-commerce Consumers' Pro-Environmental Behavior	**D1S2T2: Strategic Models in Vehicle Routing** Location: Virtual Chair: Nicole Megow Los, Johan; Schulte, Frederik; Spaan, Matthijs T.J.; Negenborn, Rudy R.: An Auction-Based Multi-Agent System for the Pickup and Delivery Problem with Autonomous Vehicles and Alternative Locations Los, Johan; Schulte, Frederik; Spaan, Matthijs T.J.; Negenborn, Rudy R.: Strategic Bidding in Decentralized Collaborative Vehicle Routing Oosterwijk, Tim[1]; Schmand, Daniel[2]; Schröder, Marc[3]: Bicriteria Nash Flows over Time	

2:30pm - 2:45pm	**Coffee Break**		
2:45pm - 3:45pm	Location: Virtual Chair: Klaus-Dieter Thoben Yumurtacı Hüseyinogu, Isık Özge1; Bäumler, Ilja2; Kotzab, Herbert2,3: Synthesising COVID-19 related research from a logistics and supply chain perspective Nitsche, Benjamin; Straube, Frank: Development Paths of International Logistics Networks: Implications from the COVID19 pandemic Rohde, Ann-Kathrin1; Pupkes, Birte1; Mortensen Ernits, Rafael1; Keiser, Dennis1; Lütjen, Michael1; Freitag, Michael1,2: Challenges and Approaches of Non-Pharmaceutical Interventions for Airport Operations during Pandemic Situations	**D1S3T2: Optimization under Uncertainty** Location: Virtual Chair: Daniel Schmand Lindermayr, Alexander; Megow, Nicole: Exploiting Untrusted Predictions in the Design of Scheduling Algorithms Megow, Nicole; Schlöter, Jens: Explorable Uncertainty meets Decision-Making in Logistics Hommelsheim, Felix1; Mühlenthaler, Moritz2; Schaudt, Oliver3: The Assignment Problem with Uncertainty	**LogDynamics Lab Visit** Chair: **Matthias Burwinkel** **Logistics and Industry 4.0 - Virtual Tour at BIBA and LogDynamics Lab** In the virtual tour in the BIBA Shop Floor Lab and in the LogDynamics Lab we show selected research results and demonstrators. Be curious about an autonomous assistance system for supporting human-machine collaboration in assembly processes as well as for unloading containers....

Wednesday February 24, 2022

10:30am - 11:15am	**D2K1: Keynote by Nils Boysen** Location: Virtual Chair: Nicalo Megow **Logistics on the last mile: New technologies, new delivery concepts, and new optimization problem**
11:15am - 11:30am	**Coffee Break**

11:30am - 12:30pm	**D2S1T1: Supply Chain Resilience** Location: Virtual	**D2S1T2: Maritime Logistics and Port Operations I** Location: Virtual	**D2S1T3: Transportation Networks and Vehicle Routing** Location: Virtual
	Chair: Herbert Kotzab	Chair: Burkhard Lemper	Chair: Daniel Schmand
	Warmbier, Piotr; Kinra, Aseem: Identifying Common Elements within Supply Chain Resilience and Sustainability - an Exploratory Study based on Bibliographic Analysis	Kastner, Marvin; Grasse, Ole; Jahn, Carlos: Container Flow Generation for Maritime Container Terminals	Cors, Tobias; Fliedner, Malte: Simulative Assessment of Patrol Car Allocation and Response Time
	Kolmykova, Anna: The Impact of Blockchain on Supply Chain Resilience	Triska, Yuri; Frazzon, Enzo Morosini: Simulation-based port storage dimensioning to mitigate operational instability	Pfeiffer, Christian; Schulz, Arne: A new lower bound for the static dial-a-ride problem with ride and waiting time minimization
	Castillo-Villagra, Raúl[1,2,3]; Thoben, Klaus-Dieter[1,2]: Towards Supply Chain Resilience in Mining Industry: A Literature Analysis.	Schütze, Felix; Schwientek, Anne Kathrina; Grasse, Ole; Jahn, Carlos: Integration of Renewable Energies at Maritime Container Terminals	Schulz, Arne; Pfeiffer, Christian: A branch-and-cut algorithm for the dial-a-ride problem with ride and waiting time minimization and time windows

12:30pm - 1:30pm	**Lunch Break**

1:30pm - 2:30pm	**D2S2T1: Digitalization of Supply Chains** Location: Virtual	**D2S2T2: Maritime Logistics and Port Operations II** Location: Virtual	**D2S2T3: Socio-technical Systems** Location: Virtual
	Chair: Otthein Herzog	Chair: Gralf-Peter Calliess	Chair: Hendrik Stern
	Brinker, Janosch; Haasis, Hans-Dietrich: The impact of power on supply chain digitalization: A research framework from a systematic literature review	Ross, Antje[1]; Lange, Kerstin[2]: An appraisal of the Northern European LNG bunker ship fleet	Milke, Viola[2]; Strau, Sarah[3]; Debbing, Christina[3]; Keil, Maria[1]; Severin, Benedikt[4]; Hesenius, Marc[4]; Ruiner, Caroline[3]; Hagemann, Vera[2]; Klumpp, Matthias[1]: Work Condition Analysis for Driving Professions with Big Data and Artificial Intelligence
	Siekmann, Fabian[1]; Kinra, Aseem[1]; Kotzab, Herbert[2]: Data Quality in Social Media Analytics for Operations and Supply Chain Performance Management	Rose, Hendrik Wilhelm[1]; Lange, Ann-Kathrin[2]; Hinckeldeyn, Johannes[1]; Jahn, Carlos[2]; Kreutzfeldt, Jochen[1]: Investigating the Requirements of Automated Vehicles for Port-internal Logistics of Containers	Gyulyev, Nizami[1]; Galkin, Andrii[1,2]; Schlosser, Tibor[2]; Capayova, Silvia[2]; Lobashov, Oleksii[1]: Assessing driver fatigue during urban traffic congestion using ECG method
	Rabarijaona, Haingo Manohisoa; Ndiaye, Alassane Ballé: Visualisation tool for an integrated radiopharmaceutical supply chain (SC) diagnostic	Lange, Eva Ricarda: Unmanned vessels and the law	Börold, Axel[1]; Broda, Eike[2]; Jathe, Nicolas[1]; Schweers, Dirk[2]; Sprodowski, Tobias[1]; Zeitler, Waldemar[1]; Freitag, Michael[2]: Technology review for guiding persons in airports and other hubs

2:30pm - 2:45pm	**Coffee Break**		
2:45pm - 3:45pm	**D2S3T1: Industry 4.0 and Digital Twins** Location: Virtual Chair: Walter Lang Zander, Bennet1,2; Lange, Kerstin1; Haasis, Hans-Dietrich2: Managing Interfaces between Smart Factories and Digital Supply Chains Jedermann, Reiner1; Lang, Walter1; Geyer, Martin2; Mahajan, Pramod2: Digital Twin features for the Intelligent Container	**D2S3T2: Sustainable and Green Logistics** Location: Virtual Chair: Aseem Kinra Hämäläinen, Esa; Inkinen, Tommi; Olaniyi, Eunice: Low Emission Choices in Freight Transport: Comparing Land and Short Sea Shipping Alternatives Sroka, Louis Vincent; Meisel, Frank: Optimization of an e-highway infrastructure to electrify the German highway network Pfoser, Sarah; Herman, Katharina; Massimiani, Andrea; Brandtner, Patrick; Schauer, Oliver: From linear to circular packaging: Enablers and challenges in the fashion industry	**D2S3T3: Models and Algorithms** Location: Virtual Chair: Tobias Sprodowski Plump, Christina1,2; Berger, Bernhard J.3; Drechsler, Rolf1,2: Choosing the right technique for the right restriction - a domain-specific approach for enforcing search-space restrictions in evolutionary algorithms Ren, Bingxuan1; Yin, Tangwen1; KARIMI, HAMID REZA2; Fu, Shan1: A cargo throughput capacity quantization estimation using semi-Markov jump system filter within partial state delay

Wednesday February 25, 2022

10:30am - 11:15am	**D3K1: Keynote by Dmitry Ivanov** Location: Virtual Chair: Aseem Kinra **Supply Chain Resilience and Ecosystem Viability at the Times of Extremal Shocks**		
11:15am - 11:30am	**Coffee Break**		
11:30am - 12:30pm	**D3S1T1: Logistics and Transportation Systems I** Location: Virtual Chair: Hendro Wicaksono Durán-Micco, Javier: A simulation study of a synchromodal logistic network Weinke, Manuel; Poschmann, Peter; Straube, Frank: Machine-Learning-based ETA predictions of logistics networks Müller, Alina1; Keuschen, Thomas1; Klumpp, Matthias1,2,3: Yard Management: Identification and Evaluation of Critical Sub-processes with AHP	**D3S1T2: Production Planning and Maintenance I** Location: Virtual Chair: Yilmaz Uygun Kießner, Phillip1; Perera, Niles2: Managing complexity in variant-oriented manufacturing: A System Dynamics approach Voß, Thomas; Bode, Christopher; Heger, Jens: Dynamic lot size optimization with reinforcement learning Scholz, Sebastian; Meisel, Frank: Energy aware coordination of heterogeneous production equipment with precedence relations and stochastic job arrivals	**D2S1T3: Transportation Networks and Vehicle Routing** Location: Virtual Chair: Daniel Schmand Cors, Tobias; Fliedner, Malte: Simulative Assessment of Patrol Car Allocation and Response Time Pfeiffer, Christian; Schulz, Arne: A new lower bound for the static dial-a-ride problem with ride and waiting time minimization Schulz, Arne; Pfeiffer, Christian: A branch-and-cut algorithm for the dial-a-ride problem with ride and waiting time minimization and time windows
12:30pm - 1:30pm	**Lunch Break**		
1:30pm - 2:30pm	**D3S2T1: Logistics and Transportation Systems II** Location: Virtual Chair: Klaus-Dieter Thoben Bäumler, Ilja; Elfers, Moritz; Dogtas, Okan; Gresens, Fynn; Eyigün, Sercan: Developing a serious game for intelligent transportation systems Perera, H. Niles; Perera, H.Y. Ranjit: Applications of Pixel Oriented Mobility Modelling in Transport & Logistics	**D3S2T2: Production Planning and Maintenance II** Location: Virtual Chair: Michael Freitag Sousa Agostino, Icaro Romolo; Flores da Silva, Mauricio Randolfo; Morosini Frazzon, Enzo; Amaral Stradioto Neto, Luciana: Integrated simulation-based optimization approach for production scheduling: A use case application in a machining process Schwemmer, Julia; Kühn, Mathias; Völker, Michael; Schmidt, Thorsten: Scheduling Workforce In Decentrally Controlled Production Systems: A Literature Review Ribeiro, Danilo Ribamar Sá1; Mendes, Lúcio Galvão1; Forcellini, Fernando Antônio1,2; Frazzon, Enzo Morosini1: Maintenance 4.0: A literature review and SWOT analysis	

2:30pm - 2:45pm	**Coffee Break**
2:45pm - 3:00pm	**Best Paper Award** Chair: Herbert Kotzab
3:00pm - 3:15pm	**Closing**