

Swedish transport research conference
16-17 October 2024

Day 1 - Wednesday 16 October, Chalmers University of Technology

9.30-10.00	Registration and coffee in the entrance hall of Chalmers Conference, Chalmersplatsen 1, 412 58 Göteborg								
10.00-11.30	Room: Scanasalen		Welcome & Keynote speech by Frances Sprei, Chalmers, and Johan Hagberg, University of Gothenburg						
11.30-12.30	Lunch at the open space outside the conference rooms								
	Room: Ledningsrummet		Room: Valdemar			Room: Ascom		Room: Catella	
12.30-14.10	S1a: Modelling and simulation of transport demand and flows 1 Chair: Sonia Yeh		S1b: New technologies and organisational forms 1 Chair: Kun Gao			S1c: Planning of transport systems 1 Chair: Arsalan Najafi		S1d: Procurement, contracts, and business models 1 Chair: Colin Kimbrell	
	No	Authors	Title	No	Authors	Title	No	Authors	Title
	12	Kinjal Bhattacharyya and Fredrik Johansson	Modelling Driver Response to Emergency Vehicle Approaching Warning using Driving Simulator Experiment	5	Shaohua Cui and Kun Gao	Throughput and Delay Tradeoff Management for Partially Connected Networks	3	Lisa Govik and Ala Arvidsson	Electrification of (heavy) vehicles in connection to industrial areas and logistic hubs
	29	Weipeng Zhan, Yuan Liao, Sonia Yeh, Junjun Deng and Zhenpo Wang	A Large-Scale Empirical Analysis of Electric Vehicle Usage and Charging: Operational Demands and Infrastructure Implications	17	Urban Nulden and Ann-Sophie Sallander	Digital Transformation - The Case of Transport of Dangerous Goods	7	Arsalan Najafi, Kun Gao and Omkar Parishwad	Joint charging infrastructure planning and charging scheduling of electric buses coupled to a power distribution network
	40	Johan Olstam, Kinjal Bhattacharyya, Amritpal Singh and Aron Asefaw	New Insights on Driving Behavior along 2+1 Roads using a Novel Vision-based Technique	19	Niklas Simm, Maria Björklund and Henrik Gillström	Collaborative Green Freight Transport: The impact on transport resilience	15	Joel Löfving, Selma Brynolf and Maria Grahm	Geospatial distribution of hydrogen demand and refueling infrastructure for long-haul trucks in Europe
				30	Abd Alla Ali Mubder Mubder and Anna Fredriksson	Characterization and effects of port community systems on maritime service quality	32	Emil Jansson, Carl-William Palmqvist and Ingrid Johansson	Delay distributions with driverless and unattended train operation on mainlines
14.10-14.40	Coffe								
14.40-16.10	S2a: Modelling and simulation of transport demand and flows 2 Chair: Ruo Jia		S2b: New technologies and organisational forms 2 Chair: Luciana Alcantara			S2c: Planning of transport systems 2 Chair: Jessica Wehner		S2d: Transport and logistics from a service perspective Chair: Juan Pablo Castellon	
	No	Authors	Title	No	Authors	Title	No	Authors	Title
	9	Samuel Hjorth, Nicolas Brusselaers, Anna Fredriksson and David Gundlegård	Machine learning modelling to predict urban construction transport demand	1	Johan Hagberg and Kajsa Hulthén	Collaboration for more sustainable urban retail transport: what makes for success and failure?	16	Mohd Aiman Khan, Wilco Burghout, Oded Cats, Erik Jenelius and Matej Cebecauer	Feasibility study for deployment of mobile autonomous charging pods (MAPs) for charging operations
	42	Ingrid Johansson, Hans Sipilä and Carl-William Palmqvist	Simulating railway punctuality in three Swedish metropolitan regions	20	Luciana Alcantara, Anna Dubois and Kajsa Hulthen	Additive manufacturing in supply networks: A means to reduce transport emissions	23	Jessica Wehner, Tobias Fors, Daniel Hellström, Henrik Pålsson, Sara Rogerson, Vendela Santén, Marta Gonzalez-Aregall, Dan Andersson and Magnus Swahn	Transport efficiency in road freight transportation: trade-offs and their underlying logic
	46	Ruo Jia and Kun Gao	Contrastive Learning for Traffic State Prediction	31	Michelle van Ardenne, Matej Cebecauer, Oded Cats and Zhenliang Ma	Design framework for personalized passenger information systems in public transport	27	Sunney Fotedar, Jiaming Wu, Balázs Kulcsár and Rebecka Jörnsten	Lagrangian decomposition approach to optimize charging operations for fleet batteries
	67	Sönke von Wieding, Johan Woxenius, Jon Williamsson, Michael Browne and Martin Svanberg	The role of local authorities for waterborne urban logistics	68	Rana Saha, Scott N. MacKinnon and Monica Lundh	Stakeholders' preparedness for autonomous inland waterway transport in an European socio-technical system	76	David Gundlegård, Elric Milet and Clas Rydergren	Estimating energy use for bus public transports using ticket and automated passenger count data
16.10-16.20	Break								
16.20-17.30	S3a: Transport policy and societal planning processes 1 Chair: Michelle Ochsner		S3b: Transport safety & Social sustainability 1 Chair: Srijita Basu			S3c: Planning of transport systems 3 Chair: Omkar Parishwad		S3d: Travel behaviour and transport demand 1 Chair: Çağlar Tozluoğlu	
	No	Authors	Title	No	Authors	Title	No	Authors	Title
	2	Michelle Ochsner, Gunnel Göransson, Johannes Hagström and Carl-William Palmqvist	Sink or Swim: Barriers and Opportunities for Dynamic Adaptation of Coastal Railways	11	Chiara Fichera, Xiaomi Yang and Rahul Rajendra Pai	Exploring Variability in Cyclists Riding Posture through Naturalistic Data: A Computer Vision and Bayesian Modelling Approach	8	Xiaohan Liu and Kun Gao	Electric bus charging infrastructure planning considering solar photovoltaics energy and shared micromobility
	50	Jon Williamsson, Anders Sandoff, Jonas Sjöblom, Sara Janhäll and Ann-Margret Strömvall	Negotiation and Reflexivity in Stakeholder-Oriented Communication	36	Srijita Basu, Miroslaw Staron, Jennifer Horkoff, Magnus Almgren, Christian Berger and Tomas Olovsson	A Survey of Recent Automotive Software Security Vulnerabilities: Trends and Attack Vectors	37	Joost Pieters, John Baggen, Adam Pel and Rob Goverde	A fully-weighted network theory approach to quantify travel alternative robustness of railway networks
	83	Jon Williamsson and Gabriela Schaad	Public charging infrastructure as a governance issue - municipal collaboration for transport electrification	85	Tayana Ortix Lopes, Patricia van Loon, Sara Fallahi and Mats Johansson	Circular electric vehicle batteries: a supply chain perspective	38	Omkar Parishwad, Kun Gao and Arsalan Najafi	Charging Demand Estimation for Passenger Electric Vehicles Using MATSim: A Case Study of Gothenburg, Sweden
19.30	Dinner at Kårrestaurangen, Chalmers University of Technology, Chalmersplatsen 1								

Day 2 - Thursday 17 October, Chalmers University of Technology

8.00-8.30								Coffee in the entrance hall of Chalmers Conference, Chalmersplatsen 1, 412 58 Göteborg																															
Room: Ledningsrummet				Room: Valdemar				Room: Ascom				Room: Catella																											
8.30-9.50								S4a: Modelling and simulation of transport demand and flows 3 Chair: Hely Dias								S4b: Pricing, regulation, policy instruments Chair: Cecilia Bergstad								S4c: Planning of transport systems 4 Chair: Therese Lundblad								S4d: Procurement, contracts, and business models 2 Chair: Ru Chen							
No		Authors		Title		No		Authors		Title		No		Authors		Title		No		Authors		Title																	
61	Danil Belikhov, Guillermo Pérez Castro, Fredrik Johansson, Heather Kathis and Johan Olstam		Assessing the impact of infrastructure on bicycling behavior: insights from an instrumented bicycle study		18	Yuan Liao, Jorge Gil, Sonia Yeh, Rafael Pereira and Laura Alessandretti		Impact of Reduced Public Transport Travel Costs on Mobility Levels and Activity Patterns: Evidence from the 9-Euro Ticket in Germany		39	Cecilia Hult		Lifecycle greenhouse gas emissions from heavy-duty trucks in Sweden with the introduction on zero-emission vehicles		63	Ru Chen and Lisa Govik		Electrifying Construction Transport: A Literature Review and Swedish Initiatives																					
64	Hely Dias and Erik Jenelius		Sustainable UCC HUB Impacts: Mobile Emission Assessment integrated to Freight demand and Road Network Modelling Methodology		71	Javad Ghanei, Jonas Flodén and Linda Styhre		Shippers' managing path dependence in the shipping industry		47	Therese Lundblad, Maria Talljégard, Niclas Mattsson and Filip Johnsson		The impact of electric vehicle charging strategies on low-voltage electricity grids		69	Victor Eriksson and Viktoria Sundquist		Organizing material transport in construction projects																					
80	Michael Sederlin, Tomas Lidén and Gunnar Flötteröd		Creation of dynamic OD matrices from static data		73	Cecilia Bergstad		Transport policy support and willingness to change behaviours		48	Anna Danielsson, David Gundlegård and Clas Rydergren		Multimodal Traffic Management: a Survey of Synergies and Challenges		75	Sara Rogerson, Vendela Santén, Jan Williamsson, Violeta Roso and Sara Kilicaslan		Modal shift to inland waterways and costal shipping																					
52		Grace Mukunzi, Emil Jansson and Carl-William Palmqvist		Factors influencing restoration time in Railways																																			
9.50-10.10								Coffee																															
10.10-11.40				S5a: Transport policy and societal planning processes 2 Chair: Sonia Yeh				S5b: Transport safety & Social sustainability 2 Chair: Konstantina Katsela				S5c: Planning of transport systems 5 Chair: Mikael Johansson				S5d: Travel behaviour and transport demand 2 Chair: Boel Berg Wincent																							
No		Authors		Title		No		Authors		Title		No		Authors		Title		No		Authors		Title																	
6	David Daniels, Sonia Yeh, Sergey Paltsev, John Reilly and Pedro Linares		Rethinking resilience measures for decarbonized transport systems		45	Jorge Gil and Susan Ruinaard		National Index of Sustainable Accessibility to Sports and Outdoors Facilities		56	Elin Hellblom, Ingrid Johansson and Anders Lindfeldt		A timetable compression approach for assessing the capacity utilization of single-track sections in Sweden		35	Abd Alla Ali Mubder Mubder and Anna Fredriksson		Mechanisms to facilitate the implementation of Just-in-Time in port calls																					
54	Jakob Allansson		Understanding protests to Bus Rapid Transit (BRT) implementation		49	Kinjal Bhattacharyya, Slawomir Nowaczyk, Rahman Amandius and Johan Olstam		Identifying Future Research Needs to Assess the Safety Performance of a Trip using a Shared Micromobility Mode		59	Catherine Ballesteros-Gómez, Jonas Flodén and Marta Gonzalez-Aregall		Fresh food transportation systems in Sweden: local and global perspectives		43	Nils Breyer, Nikolaus Stratil-Sauer and Anders Peterson		Predicting the reliability of train journeys																					
51	Shiva Habibi and Pontus Svenson		Bayesian perspective on forecast uncertainty		53	Jon Williamsson, Konstantina Katsela and Michael Browne		Curbside management – a stakeholder perspective		65	Mikael Johansson and Marianne Karlsson		Park & Ride revisited. A commuter perspective on Park & Ride today and tomorrow.		55	Pengxiang Zhao, Aoyong Li and Ali Mansourian		Exploring the spatiotemporal variations of shared e-scooter usage in response to the parking regulations in Sweden																					
70	Zeeshan Raza, Martin Svanberg, Sara Rogerson and Christian Finnsgård		Analysing resilience of maritime energy supply chains						81	Razi Zoabi, Jack Haddad and Balazs Kulcsar		Efficient Urban Traffic Control Using Max Pressure Algorithms		77	Boel Berg Wincent, Erik Jenelius and Wilco Burghout		Who Combines Shared E-Scooters and Public Transportation? Insights from Stockholm, Gothenburg, and Malmö																						
11.40-12.30								Lunch at the open space outside the conference rooms																															
12.30-13.15				Room: Ledningsrummet-Valdemar				Keynote speech by Lóránt Tavasszy, TU Delft - Freight modelling for the next big logistics innovations																															
13.15-13.25								Break																															
13.25-14.45				S6a: Transport policy and societal planning process 3 Chair: Jorge Gil				S6b: Workshop on Stakeholder-Oriented Communication Chair: Jon Williamsson				S6c: Planning of transport systems 6 Chair: Maria de Oliveira Laurin				S6d: Chair:																							
No		Authors		Title		No		Authors		Title		No		Authors		Title		No		Authors		Title																	
85	Flavia Lopes, Jorge Gil and Ioanna Stavroulaki		A Geographic Model to Address the Interoperability Between Urban and Public Transport Planning: the case of Gothenburg		Workshop title: Negotiation and Reflexivity in Stakeholder-Oriented Communication: - The Case of University-Based Collaboration for Policy Design Targeting Local Transport				74	Maria de Oliveira Laurin and Maria Grahm		The Importance of Local Dynamics – Insights on Passenger Car Decarbonization																											
28	Fangting Zhou, Balazs Kulcsar and Jiaming Wu		Collaborative Charging Scheduling Problem		Universities and research institutes play an important role in the development of environmental policies that target the sector. Yet, knowledge generating organizations struggle with a growing public mistrust in science and authorities. In this workshop we explore different approaches that support policy design for a sustainable				82	Hamoun Pourroshanfekr Arabani, Mattias Ingelström, Francisco J. Márquez-Fernández and Mats Alaküla		Dynamic Charging Behaviors in Electric Road Systems: A Multi-Agent Simulation Study																											
												84	David Dekker, Carl Henrik Häll, Anders Peterson and Christiane Schmidt		A New Method for Inserting Train Paths into a Timetable																								
14.45-15.30								Coffee and mingle																															