



**TECHNISCHE
UNIVERSITÄT
DRESDEN**



**CHAIR OF
RAILWAY
OPERATIONS**

Workshop KTH – TU Dresden

Mobility | Rail, Freight and Public Transport

Dresden, March 21th-22th 2024

Thursday, 21th March

Intro	09:30	POT-168 (Nikola Bešinović, Regine Gerike, Erik Jenelius)
Fika / Coffee break	10:30	POT-168
Stream A	11:00	
Public transport		POT-168 (Session chair: Jörn Schönberger)
Jonas Krombach	TUD	From global sustainability visions to local interpretations and priorities: Planners' perspectives and their translation into strategic urban mobility planning in German cities
Zhenliang Ma	KTH	LLM for individual mobility prediction
Anastasios Skoufas	KTH	Assessing and understanding contributions of sub-groups to public transport crowding
Jörn Schönberger	TUD	Reconstructing simulation scenarios for public transport networks from open data sources
Rail		POT-161 (Session chair: Oskar Fröidh)
Francesco Bruno	KTH	Possibilities to replace short-haul flights with train travel when accounting for rail capacity
Oskar Fröidh	KTH	Rail traffic group
Tabish Haque	TUD	Resilience infrastructure assessment: Cologne case study
Elin Hellblom	KTH	Extension of UIC 406-based capacity analysis for railway stations
Lunch	12:15	(Alte Mensa)
Stream B	13:15	
Freight		POT-168 (Session chair: Maurice Krauth)
Philipp Salger	TUD	Conveying robot system for automating the pushing, uncoupling and coupling process in European rail freight transport
Mohammad Al-Mousa	KTH	Rail freight capacity and service quality in mixed traffic
Henning Preis	TUD	Incorporating alternative processing in optimal rescheduling of railway classification yards
Maurice Krauth	TUD	Optimising mode choice in a bi-modal freight network
Rail		POT-151 (Session chair: Jan Eisold)
Chris Szymula	TUD	A path-based train dispatching model for disruption management in networks
Hans Sipilä	KTH	Headway modeling in ETCS L2
Ingrid Johansson	KTH	Contingency, capacity, and other fun stuff
Jan Eisold	TUD	Infrastructure dimensioning in freight yards using mathematical optimization
Fika / Coffee break	14:30	POT-168
Stream C	15:00	
Freight		POT-168 (Session chair: Niloofar Minbashi)
Jing Shan	TUD	Supply chain oriented integrated tactical planning method for international rail freight transport
Niloofar Minbashi	KTH	Machine learning applications in rail freight operations
Daniel Haalboom	TUD	Two-stage approach for rail freight terminal scheduling with mainline interaction
Uwe Höppner	TUD	Urban railfreight services – could cities support the growth-targets in rail?
Public transport		POT-151 (Session chair: Helry Dias)
Zirui Li	TUD	Predicting city-wide bus/tram arrival time in Dresden
Helry Dias	KTH	Urban travel demand and traffic simulations - A sustainable approach based on technology restrictive measures
Meng Wang	TUD	Modelling and control of multimodal traffic: An overview of the Chair of Traffic Process Automation
Steffen Dutsch	TUD	Station stopping times: Bottleneck of the Munich Rapid Transit System

Friday, 22th March

Stream D **10:30**

Public transport

POT-168 (Session chair: Jonas Jostman)

Mohammad Maghrour Zefreh	KTH	Passenger Transport Systems: from Passengers to Service
Johannes Weber	TUD	Constants and Dynamics in Travel Behavior: Methods and Results
Vahid Noroozi	TUD	Assessment of Strategies for Sustainable Mobility with Multi-Agent Transport Simulation MATSim
Jonas Jostman	KTH	Machine-Learning informed simulation-based dynamic traffic assignment with SUMO

Data

POT-161 (Session chair: Pascal Kerschke)

Yuanyuan Wu	KTH	The Application of Machine Learning and Data Mining Techniques in the management of CAVs and the relevant Ethics"
Sebastian Dengel	TUD	Scooter Data Analytics
Mohd Aiman Khan	KTH	Dynamic charging solutions for electric autonomous vehicles
Pascal Kerschke	TUD	Overview of Big Data Analytics at TUD

Wrap-up **11:45** **POT-168**

Lunch **12:15** **(Alte Mensa)**





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