

20th Swiss Transport Research Conference Online Conference, May 13-14, 2020

Wednesday 13 May 2020

Opening and Keynote speech

Prof. Ola Jabali Polytechnic University o

Polytechnic University of Milan
Using Electric Vehicles for Goods Distribution

Zoom link: https://epfl.zoom.us/j/97175091783

Session 1

| | Session 1 | | | | | | |
|-------|---|---|---|---|--|--|--|
| | Chair: Maggi | Chair: Alahi | Chair: Corman | Chair: Bierlaire | | | |
| | Room 1 | Room 2 | Room 3 | Room 4 | | | |
| | https://epfl.zoom.us/j/94272367567 | https://epfl.zoom.us/j/98204465389 | https://epfl.zoom.us/j/99218728803 | https://epfl.zoom.us/j/93136359760 | | | |
| 10:40 | Modeling Traffic Around a Pedestrian Zone in a Monocentric Network (31) | Matching in carpooling under congestion (22) | Modeling and Optimization of Dedicated Bus Lanes space allocation in large networks with dynamic congestion (65) | Approaches for real-time train delay prediction (30) | | | |
| 11:00 | Passenger-oriented rescheduling of trains and rolling stocks for urban rail transit networks (36) | Long-distance buses in Switzerland (35) | Quantifying the direct and indirect effect of the disruption in public transport on passengers' behavior by using a multi-agent simulation (27) | Route-choice Control with Optimal Dynamic Pricing in Urban Large-scale Networks (18) | | | |
| 11:20 | Revisiting Forecasting Models for Human Motion Prediction (50) | Vehicle Sharing Systems: Does demand forecasting yield a better service? (52) | MOBIS study: A review of common reported issues (59) | Scheduling of daily activities: an optimization approach (41) | | | |
| 11:40 | Modelling oneway carsharing in the city of Shanghai, China (14) | Shared micromobility in Zurich, Switzerland: Analysing usage, competition and mode choice (66) | Driver Performance in the Presence of Bicycle Infrastructure (61) | Synthetic Population of Greater Jakarta: An Iterative Proportional Updating Approach (44) | | | |

Lunch Break

Round table

The influence of COVID in mobility in CH and worldwide

Mr. Jürg Röthlisberger - Director of the Federal Roads Office (FEDRO)
Dr. Nicole Mathys - Head of section, Federal Office for Spatial Development ARE

Prof. Jonas Elliasson - Director of Transport Accessibility, Swedish Transport Administration, Visiting professor of Transport Systems, Linköping University

Mr. Armin Weber - Head of International Passenger Traffic, Swiss Federal Railways (SBB)

Moderator: Prof. Nikolas Geroliminis - Professor of Transport, EPFL

YouTube live streaming: https://youtu.be/KjUIEsNFTXQ

End of Day

13:00 - 14:

09:30

- 10:

| | | Thursday 14 May | 2020 | | | |
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| | | Session 2 | | | | |
| | Chair: Danalet | Chair: Kouvelas | Chair: Chistofa | Chair: de Laparrent | | |
| | Room 1 | Room 2 | Room 3 | Room 4 | | |
| | https://epfl.zoom.us/j/97779615924 | https://epfl.zoom.us/j/95392202972 | https://epfl.zoom.us/j/92702881591 | https://epfl.zoom.us/j/93653036776 | | |
| 09:30 | Identifying shockwaves and estimating their critical parameters utilising a dataset from a swarm of drones (64) | Vehicle emissions estimation using naturalistic data from a swarm of drones (63) | Speed prediction for freeway networks with identity mapping augmented dynamic linear model (60) | Macroscopic modeling of ride-sourcing services (62) | | |
| 09:50 | Vehicle Detection Using Fields (24) | When Deep Generative Modeling Meet Markov Decision Processes: a Deep Bayesian Approach for High-dimensional Data Discovery (20) | Towards a data-driven survey methodology (12) | Next Steps for Image Synthesis using Semantic Segmentation (34) | | |
| 10:10 | Traffic estimation for highways: the data fusion case (38) | The role of incomplete information to passengers in real-time railway traffic control (25) | Identification of Potential Sources of Error Propagation in MATSim (29) | Analysis of ridepooling strategies with MATSim (9) | | |
| 10:30 | Structural controllability of highway networks (37) | A resilience-based perimeter control strategy for urban roadway systems (54) | preciseWTA: Precise Winner-Takes-All Loss for Multimodal Vehicle Prediction (53) | Bilinear Multimodal Discriminator for Adversarial Domain Adaptation with Privileged Information (42) | | |
| | | Short Break | | | | |
| | | Session 3 | | | | |
| | Chair: Axhausen | Chair: Gonzales | Chair: Laesser | | | |
| | Room 1 | Room 2 | Room 3 | | | |
| | https://epfl.zoom.us/j/97779615924 | https://epfl.zoom.us/j/95392202972 | https://epfl.zoom.us/j/92702881591 | | | |
| 11:00 | A unified discrete choice modeling framework of heterogenous decision rules accounting for non-trading behavior (21) | Effects of transport systems on housing rents: a probabilistic investigation of accessibility measures (10) | Designing a MATSim scenario for São Paulo, Brazil (48) | | | |
| 11:20 | Usage potentials of shared transport services in urban areas in Germany (4) | A comprehensive app-based longitudinal study of travel, time use and expenditures (11) | Variational Bayesian Inference for Spatial Negative Binomial Count Data Models with Unobserved Heterogeneity (26) | | | |
| 11:40 | Add Image to My Choice: Including a New Input Type to Discrete Choice Modeling with Representation Learning (32) | Holistic, integrated generation of daily-activity plans for Switzerland: from population synthesis to trip generation (23) | How much do transit passengers rely on online information? A revealed preference approach based on tracking (8) | | | |
| 12:00 | Environmental benefits of bike-sharing based on travel mode choice (16) | Generating Synthetic mobile phone datasets using MATSim (58) | Pose Tracking for Anonymized Videos (33) | | | |
| 12:20 | Closing Remarks | | | | | |
| 12:20 | | https://epfl.zoom.us/j/97779615924 | | | | |
| 12:20 | | https://epfl.zoom.us/j | | | | |