

# Conference program

## National conference in transport research

### October 22-23, 2019

Day 1 - Tuesday October 22 at Linköping University, Campus Valla

|                                                                                         |                                                                                                    |                                                                                                                                                             |                                                                                                                |                                                                                                                         |                                                                                                                                |                                                                                                                                                               |
|-----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 09.00-10.30                                                                             | Registration and coffee in AGORA outside room A2                                                   |                                                                                                                                                             |                                                                                                                |                                                                                                                         |                                                                                                                                |                                                                                                                                                               |
| 10.30-11.45                                                                             | Room A2                                                                                            | Welcome and Keynote speech by Professor Alan McKinnon, Kuehne Logistics University<br><b>"In Pursuit of Zero Carbon Logistics"</b>                          |                                                                                                                |                                                                                                                         |                                                                                                                                |                                                                                                                                                               |
| 11.45-13.00                                                                             | Lunch at Kärallen, Campus Valla                                                                    |                                                                                                                                                             |                                                                                                                |                                                                                                                         |                                                                                                                                |                                                                                                                                                               |
| 13.00-14.30                                                                             | <b>Room A31</b><br>Chair: Helena Forslund<br><b>Presenter</b><br>Henrik Johansson, Maria Björklund | <b>Session 1a: Transport efficiency</b><br><b>Title</b><br>Potential for value added UCC-services, results from a Swedish survey study                      | <b>Room A32</b><br>Chair: Erik Jenelius<br><b>Presenter</b><br>Balázs Varga, Tamás Tettamanti, Balázs Kulcsár  | <b>Session 2a: Traffic control</b><br><b>Title</b><br>Chance-constrained trajectory planning                            | <b>Room A33</b><br>Chair: Mats Abrahamsson<br><b>Presenter</b><br>Malin Aldenius, Helene Lidestam, Panagiota Tsaxiri           | <b>Session 3a: Public transport</b><br><b>Title</b><br>What environmental requirements do Swedish regions set on public bus transport and why do they differ? |
|                                                                                         | Linnea Kjellsdotter Ivert, Joakim Kalantari, Lena Hisselius, Jenny Karlsson                        | Energy efficient distribution systems for E-grocery                                                                                                         | Rémi Lacombe, Nikolce Murgovski, Sébastien Gros, Balázs Kulcsár                                                | Hierarchical control and energy management for electric buses                                                           | Debora Lombardi                                                                                                                | Zooming on the passengers' proximal space on public transportation: crowding and the mitigating role of design                                                |
|                                                                                         | Victor Eriksson, Anna Dubois, Kajsa Hultthén                                                       | How buying companies can influence transport efficiency in their supply networks                                                                            | Johan Olstam, Iman Pereira, Fredrik Johansson, Viktor Bernhardsson, Mikael Ivari                               | Impacts of automated vehicles in shared space – results from traffic simulation experiments                             | Pernille Ulfvengren, Susanna Kihl, Karl Garne, Mats Engwall                                                                    | Waterways internalization - conditions for planning for multimodal transportation solutions in Stockholm                                                      |
|                                                                                         | Kaamran Rashidi                                                                                    | A comparative analysis between AHP and DEA: Clustering suppliers for gradual improvement using self-organizing map                                          | Jiaming Wu, Balazs Kulcsar, Xiaobo Qu                                                                          | Robust adaptive cruise control for automated vehicles in naturalistic driving scenarios                                 | Alexander Paulsson, Birgitta Västestam, Stig Westerdahl, Anders Wretstrand                                                     | Calculative epistemologies in regional public transport markets: oligopoly-formation, bid-management strategies and entry barriers                            |
| 14.30-15.00                                                                             | Coffee                                                                                             |                                                                                                                                                             |                                                                                                                |                                                                                                                         |                                                                                                                                |                                                                                                                                                               |
| 15-16.30                                                                                | <b>Room A31</b><br>Chair: Jan Lundgren<br><b>Presenter</b><br>Inge Vierth, Magnus Johansson        | <b>Session 1b: Sustainable freight transport</b><br><b>Title</b><br>The impact of alternative environmentally differentiated fairway dues systems in Sweden | <b>Room A32</b><br>Chair: Jan-Erik Swärd<br><b>Presenter</b><br>Ellen F. Grumert, Joakim Ekström, Johan Olstam | <b>Session 2b: Motorway traffic management</b><br><b>Title</b><br>Capacity estimation of bottlenecks at urban motorways | <b>Room A33</b><br>Chair: Lars E Olsson<br><b>Presenter</b><br>Emma Strömblad, Lena Winslott Hisselius, Lena Smidfelt Rosqvist | <b>Session 3b: Travel behaviour</b><br><b>Title</b><br>The magnitude and type of everyday leisure travel by car in Sweden                                     |
|                                                                                         | Rune Karlsson, Jenny Karlsson, Annelie Carlsson, Joakim Kalantari                                  | Energy and climate efficient freight transport from a national systems perspective                                                                          | Musa Furkan Keskin, Bile Peng, Balazs Kulcsar, Henk Wymersch                                                   | Freeway traffic jam mitigation via connected automated vehicles                                                         | Erika Ramos, Cecilia Jakobsson Bergstad                                                                                        | Modelling intention to use car sharing from a psychological perspective                                                                                       |
|                                                                                         | Axel Merkel                                                                                        | Regional productivity effects of reduced maritime transport costs: Evidence from a treatment-control approach                                               | Johan Olstam, Clas Rydegren, Ivan Postigo                                                                      | How may automated vehicles affect traffic performance of urban motorways?                                               | Jeppe Rich, Gunnar Flötteröd, Sergio Garrido                                                                                   | Review of population synthesis methods                                                                                                                        |
|                                                                                         | Maria Björklund, Veronica Svensson Ölgen, Henrik Johansson, Niklas Simm, Helena Forslund           | Who is driving towards sustainable transportation?                                                                                                          |                                                                                                                |                                                                                                                         | Anastasia Lemetti, Tatiana Polishchuk, Raul Sáez, Xavier Prats                                                                 | Evaluation of Flight Efficiency for Stockholm Arlanda Airport Arrivals                                                                                        |
| Dinner at Linköpings Festvåning - Linköpings Läkaresällskap, Klostergatan 45 C, at 6 pm |                                                                                                    |                                                                                                                                                             |                                                                                                                |                                                                                                                         |                                                                                                                                |                                                                                                                                                               |

Day 2 - Wednesday October 23 at Linköping University, Campus Valla

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| 08.30-10.00 | <b>Room A31</b><br>Chair: Johan Olstam<br><b>Presenter</b><br>Nils Breyer, David Gundlegård, Clas Rydgergen | <b>Session 4a: Routing and travel patterns</b><br><b>Title</b><br>Comparative analysis between travel patterns from cellular network data and an urban travel demand model | <b>Room A32</b><br>Chair: Lena Hisselius<br><b>Presenter</b><br>Anna Fredriksson, Mats Jänné, Victor Eriksson, Kajsa Hultthén, Viktoria Sundquist | <b>Session 5a: Construction logistics</b><br><b>Title</b><br>Construction logistics solutions and their impact on costs, productivity and innovation | <b>Room A33</b><br>Chair: Jan-Erik Swärd<br><b>Presenter</b><br>Abderrahman Ait Ali, Jennifer Warg, Jonas Eliasson                   | <b>Session 6a: Pricing</b><br><b>Title</b><br>Pricing commercial train path requests based on societal costs                                                          |
|             | Nikolaos Tsanakas, J. Ekström, D. Gundlegård, J. Olstam, C. Rydgergen                                       | Data-driven network assignment                                                                                                                                             | Farah Naz, Anna Fredriksson                                                                                                                       | Developing transport performance measures for construction logistic solutions                                                                        | Emanuel Broman, Jonas Eliasson                                                                                                       | Dynamic pricing of track capacity in the short-term allocation process                                                                                                |
|             | Tatiana Polishchuk, Valentin Polishchuk, Xavier Prats, Raul Sáez, Christiane Schmidt                        | Automation for separation with CDO:s dynamic aircraft arrival routes                                                                                                       | Anna Fredriksson, Martin Svanberg, Michael Browne                                                                                                 | The potentials and barriers of using sea transport for construction materials                                                                        | Ajsuna R. Rushid, Maria Börjesson, Chengxi Liu                                                                                       | The effects of optimal rail access charges on intercity rail price and supply – the case of Sweden                                                                    |
|             |                                                                                                             |                                                                                                                                                                            |                                                                                                                                                   |                                                                                                                                                      | Sangjun Bae, Balázs Kulcsár, Sébastien Gros, Jonas Hellgren                                                                          | Pricing policy for long distance charging                                                                                                                             |
| 10.00-10.30 | Coffee                                                                                                      |                                                                                                                                                                            |                                                                                                                                                   |                                                                                                                                                      |                                                                                                                                      |                                                                                                                                                                       |
| 10.30-12.00 | <b>Room A31</b><br>Chair: Clas Rydgergen<br><b>Presenter</b><br>Gunnar Flötteröd                            | <b>Session 4b: Transport modelling</b><br><b>Title</b><br>Progress on a strategic urban transport planning model                                                           | <b>Room A32</b><br>Chair: Anna Fredriksson<br><b>Presenter</b><br>Anders Bondemark, Henrik Andersson, Anders Wretstrand, Karin Brundell-Freij     | <b>Session 5b: Transport policy 1</b><br><b>Title</b><br>Is it expensive to be poor? The case of public transport in Sweden                          | <b>Room A33</b><br>Chair: Joakim Kalantari<br><b>Presenter</b><br>Chengxi Liu, Maria Börjesson, Ajsuna R. Rushid, Ida Kristoffersson | <b>Session 6b: Railway 1</b><br><b>Title</b><br>Social welfare optimization of high-speed railway service under heterogeneous demand and capacity constraints         |
|             | Matej Cebecauer                                                                                             | Public transport disruptions management strategies – Demand responsive and public transport system-of-system                                                               | Karin Lättman, Lars E Olsson, Margareta Friman, Satoshi Fuji                                                                                      | Elderly's opportunities to live the life they want, considering how they travel                                                                      | Daria Ivina, Robin Stenberg, Nils Olsson, Lena Winslott Hisselius                                                                    | The role of contract relationship for the maintenance planning process                                                                                                |
|             | Soumela Peftitse, Erik Jenelius, Oded Cats                                                                  | Evaluating crowding in individual train cars using a dynamic transit assignment model                                                                                      | Carolina Camén, Panagiota Tsaxiri, Malin Aldenius, Helene Lidestam                                                                                | Flexibility aspects in public transport in Sweden                                                                                                    | Peter T. Torstensson, Lisa Svanberg, Ragnar Hedström                                                                                 | Prediction model for future competence and resource needs associated with Swedish rail-bound infrastructure                                                           |
|             | Ida Kristoffersson, Albin Engholm, Anna Pernestål                                                           | Development of an assessment method for driverless vehicles' contribution to a sustainable transport system                                                                | Lisa Svanberg, Roger Pyddöke                                                                                                                      | Policies for crowding in public transportation: A literature review                                                                                  |                                                                                                                                      |                                                                                                                                                                       |
| 12.00-13.00 | Lunch at Kärallen, Campus Valla                                                                             |                                                                                                                                                                            |                                                                                                                                                   |                                                                                                                                                      |                                                                                                                                      |                                                                                                                                                                       |
| 13.00-14.30 | <b>Room A31</b><br>Chair: Margareta Friman<br><b>Presenter</b><br>Wei Zhang, Erik Jenelius, Hugo Badia      | <b>Session 4c: Autonomous bus services</b><br><b>Title</b><br>Efficiency of semi and fully autonomous bus services: An analytical approach                                 | <b>Room A32</b><br>Chair: Mats Abrahamsson<br><b>Presenter</b><br>Maria Börjesson, Anne Bastian, Jonas Eliasson                                   | <b>Session 5c: Transport policy 2</b><br><b>Title</b><br>The economics of low-emission zones                                                         | <b>Room A33</b><br>Chair: Jan Lundgren<br><b>Presenter</b><br>Ingrid Johansson, Jennifer Warg                                        | <b>Session 6c: Railway 2</b><br><b>Title</b><br>Railway simulation with incomplete data: Creation of realistic timetables for microscopic and macroscopic simulations |
|             | David Leffler, Erik Jenelius, Oded Cats, Wilco Burghout                                                     | Simulation based evaluation of fixed versus on-demand feeder operations                                                                                                    | Johanna Takman, Inge Vierth, Cecilia Gustafsson, Noor Sedehi Zadeh, Kevin Cullinane, Anastia Christodoulou, Marta Gonzalez-Aregall                | A taxonomy of modal shift policy in Europe                                                                                                           | Niloofer Minbashi, Markus Bohlin, Behzad Kordnejad                                                                                   | A delay prediction model for freight trains in Swedish yards                                                                                                          |
|             | Hugo Badia, Erik Jenelius                                                                                   | Operation of automated for first/last-mile solutions: fixed routes versus door-to-door trips                                                                               | Jan-Erik Swärd, Henrik Andersson, Noor Sedehi Zadeh, Mikael Ögren                                                                                 | Noise cost in different residential environments                                                                                                     |                                                                                                                                      |                                                                                                                                                                       |
|             | Jonas Hatzenbuehler, Erik Jenelius, Oded Cats                                                               | Network design for line based autonomous vehicle in public transport services                                                                                              |                                                                                                                                                   |                                                                                                                                                      |                                                                                                                                      |                                                                                                                                                                       |
| 14.30-15.00 | Coffee and mingle!                                                                                          |                                                                                                                                                                            |                                                                                                                                                   |                                                                                                                                                      |                                                                                                                                      |                                                                                                                                                                       |