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## MATSim User Meeting 2018: Program

Atlanta, GA, USA

23 June 2018

**MATSim**  
Multi-Agent Transport Simulation



**ETH**  
Eidgenössische Technische Hochschule Zürich  
Swiss Federal Institute of Technology Zurich

# 1 The MATSim User Meeting

## 1.1 The Meeting

The MATSim User Meeting is an annual event around the MATSim mobility simulation ([www.matsim.org](http://www.matsim.org)). It takes the form of a one-day seminar where MATSim users, developers and enthusiasts can meet, exchange experiences, give and get feedback, and network.

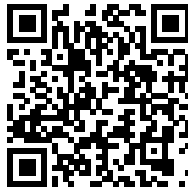
Edition 2018 takes place on June 23rd, 2018 in Atlanta, GA, USA, right next to the venue of TRB's "Innovations in Transport Modeling" conference, held from June 24th to June 27th.

## 1.2 Venue and Registration

The meeting takes place at Roam Buckhead, 3365 Piedmont Rd NE, Atlanta GA 30305.

Participants and presenters are kindly required to register for the event by visiting the following link or QR Code:

<https://www.eventbrite.com/e/matsim-2018-user-meeting-tickets-44832248462>



The small fee will help cover room rental and catering costs.

## 1.3 Information for Presenters

Presentation slots are 25 minutes. Please calibrate your presentations to last 20 minutes at most, to allow time for feedback.

## 1.4 Contact Information

For additional information, please contact [thibaut.dubernet@ivt.baug.ethz.ch](mailto:thibaut.dubernet@ivt.baug.ethz.ch).

## 2 Program

### 2.1 Morning Program

Time	Presentation
08:30 – 08:35	Welcome and Introduction <i>Kai Nagel</i>
Session I: Advances in Software	
08:35 – 09:00	Modeling Realistic Intersection Behavior in an Agent-Based Transport Simulation <i>Theresa Thunig</i>
09:00 – 09:25	An Introduction to the BEAM Framework <i>Rashid Waraich, Colin Sheppard, Sid Feygin, Michael Zilske, Andrew Campbell, Tom Wenzel and Anand Gopal</i>
09:25 – 09:50	Using Optimal Stopping Theory for the Route Choice During the Relaxation Process in Multi-Agent Simulation <i>Timofey Volotskiy and Jaroslav Smirnov</i>
09:50 – 10:15	Recent Developments <i>Kai Nagel</i>
<i>Coffee Break</i>	
Session II: Simulation of Public Transport	
10:45 – 11:10	Development of a MATSim Model to Support Decisions in a Railway Corporation <i>Wolfgang Scherr and Patrick Manser</i>
11:10 – 11:35	Evaluation of bus operating strategies in New York City with multi-agent simulation <i>Jinkai Zhou, Yueshuai He and Joon Park</i>
11:35 – 12:00	Riding the first mile: Assessing the capabilities of demand responsive transport for feeding transit stations in the Bay area. <i>Joschka Bischoff, Elham Pourrahmani, Caroline Rodier and Anmol Pahwa</i>
12:00 – 12:25	An extended transit assignment model in MATSim: A case study of Hong Kong <i>Enoch Lee and Hong Kam Lo</i>

## 2.2 Afternoon Program

Time	Presentation
Session III: (Autonomous) Taxi Services	
14:00 – 14:25	The Impact of Autonomous Vehicles on Accessibilities in a Metropolitan Region <i>Dominik Ziemke and Joschka Bischoff</i>
14:25 – 14:50	Modelling of Autonomous Vehicle Ride-sharing Services (AVRS) - The MERGE Greenwich project <i>Haris Ballis</i>
14:50 – 15:15	Agent-based Simulation of the Ride-hailing Market <i>Rashid Waraich, Colin Sheppard, Sid Feygin, Andrew Campbell, Michael Zilske, Tom Wenzel and Anand Gopal</i>
15:15 – 15:40	Agent-based Simulation of Urban Air Mobility <i>Raoul Rothfeld, Milos Balac and Constantinos Antoniou</i>
<i>Coffee Break</i>	
Session IV: Data Sources and Applications	
16:10 – 16:35	Leveraging Passive Data and MATSim to Provide Transportation Scenario Planning Through a Web-Based Interface <i>Greg Macfarlane and Josie Kressner</i>
16:35 – 17:00	Integrated Agent-based Evacuation Modeling and Simulation using MATSim <i>Yuan Zhu, Kaan Ozbay and Ding Wang</i>
17:00 – 17:25	Estimation of Roadway Volumes Using a Passive Data Source <i>Sashikanth Gurram</i>
17:25 – 18:00	Closing and Discussion <i>Kay Axhausen</i>

### 3 MATSim in the ITM Conference

In addition to the presentations held at the User Meeting, the program of the ITM conference contains a variety of presentations related to MATSim. Following is a list of the titles of the presentations we are aware of.

#### 3.1 Research Briefs

- Bridging discrete mode choice modelling and microsimulation in MATSim. *Sebastian Hörl, Milos Balac, Kay W Axhausen*

#### 3.2 Lightning Talks

- Impact assessment of autonomous DRT systems. *Joschka Bischoff, Michal Maciejewski*
- An Innovative Transport Model Architecture to Forecast a Passenger Railway's Future. *Wolfgang Scherr, Denis Métrailler*
- Shared autonomous vehicles as a replacement for buses: A simulation study in Berlin. *Gregor Leich, Joschka Bischoff*
- Agent-based Modeling of Variable Road Pricing Schemes. *Joseph Molloy, Kay W Axhausen*
- Incorporating infrastructure characteristics and vehicular interactions into an agent-based transport simulation framework for a realistic simulation of bicycle traffic. *Dominik Ziemke, Amit Agarwal*
- After MATSim has finished running: presenting some new visualizations. *Billy Charlton*
- An accessibility-driven transit network design. *Timofey Volotskiy, Kai Nagel, Jaroslav Smirnov*
- Empowering Virtual Agents with the Freedom to Choose: Embedding Modal Choice Models into BEAM, the Agent-Based Framework for Behavior, Energy, Autonomy, and Mobility. *Colin J.R. Sheppard, Rashid Waraich, Sid Feygin, Andrew Campbell, Michael Zilske, Tom Wenzel, Joan Walker, Anand Gopal*
- Agent-Based Simulation of Autonomous Electrified Transportation Network Companies. *Colin J.R. Sheppard, Rashid Waraich, Sid Feygin, Michael Zilske, Tom Wenzel, Anand Gopal*
- Impacts of Transit-Oriented Compact-Growth on Air Pollutant Concentrations and Exposures in the Tampa Region. *Sashikanth Gurram, Amy Stuart, Abdul Pinjari*