

Traffic & Granular Flow 2017 | Washington, DC



Conference Program

<http://tgf17.gwu.edu>

Program

Wednesday, July 19	
16:00	Distribution of Registration Materials (B1 Registration Table)
17:00	Welcome Reception (B1167)
20:00	End of Day

Thursday, July 20 (Morning)	
7:30	Breakfast (B1167)
8:30	Plenary Session Speakers (B1220 - B1270) Session Chairs: Armin Seyfried and Andreas Schadschneider
	PS1: New Approaches to Wireless Communications to Traffic Flow Sensing and Beyond Antonio Caamaño
	PS2: Clogging in Particle Flows: from Granular Matter to Pedestrians Daniel Parisi
	PS3: Traffic Flow Dynamics in a Connected, Automated Transportation System Alireza Talebpour
10:00	Coffee Break (B1167)
10:30	Lectern Session I-A: Connected and Automated Vehicles: Simulation and Analysis (B1220) Session Chair: Benedikt Zönnchen
	Lectern Session II-A: Pedestrian Flow Modeling: Fundamental Analytics (B1270) Session Chair: Oksana Koltsova
	L1: (54) Prediction of Moving Bottleneck and Associated Traffic Phenomena for Automated Driving <u>Dominik Wegerle</u> , Boris Kerner, Michael Schreckenberg and Sergey Klenov
	L1: (5) What are crowds made of: particles, living beings or human subjects Sieben Anna, Jette Schumann and <u>Armin Seyfried</u>
	L2: (74) Large-scale Modeling of Connected Vehicle Systems <u>Ahmed Elbery</u> , Hesham A. Rakha and Mustafa ElNainay
	L2: (29) Investigating the effect of social groups in uni-directional pedestrian flow Yiping Zeng, <u>Luca Crociani</u> , Andrea Gorrini, Giuseppe Vizzari and Weiguo Song
	L3: (79) Modeling Connected and Autonomous Vehicles in Heterogeneous Traffic Flow <u>Lanhang Ye</u> and Toshiyuki Yamamoto
	L3: (48) Langevin modeling of pairwise avoidance in pedestrian dynamics and data representation <u>Alessandro Corbetta</u> , Jasper Meeusen, Chung-min Lee, Roberto Benzi and Federico Toschi
	L4: (101) connected vehicle algorithms for highway weaving sections <u>Haitao He</u> , Kaidi Yang and Monica Menendez
	L4: NP

Thursday, July 20 (Afternoon)	
12:00	Lunch (B1167)
13:30	<p>Lectern Session I-B: Complex or Non-Conventional Traffic : Theoretical Modeling and Analysis (B1220) Session Chair: Kentaro Kumagai</p> <p>Lectern Session II-B: Pedestrian Behavior Modeling (B1270) Session Chair: Seungmo Kang</p>
	<p>L1: (1) Chaos-like Interactions of Competing Transport Networks Serge Hoogendoorn, Ilse Galama and <u>Winnie Daamen</u></p> <p>L1: (15) Micro and Macro Pedestrian Dynamics in Counterflow: the Impact of Social Groups <u>Luca Crociani</u>, Andrea Gorrini, Claudio Feliciani, Giuseppe Vizzari, Katsuhiro Nishinari and Stefania Bandini</p>
	<p>L2: (59) Mixed Flows of Deformable Self-Driven Objects <u>Takashi Mashiko</u></p> <p>L2: (25) Population Dynamics Models for Intersecting Pedestrian Streams <u>Nikolai Bode</u></p>
	<p>L3: (39) Static Traffic Assignment on Ensembles of Synthetic Road Networks <u>Alonso Espinosa Mireles de Villafranca</u>, Richard Wilson and Richard Connors</p> <p>L3: (66) Automated Quality Assessment of Space-Continuous Models for Pedestrian Dynamics <u>Valentina Kurte</u>, Mohcine Chraibi and Antoine Tordeux</p>
	<p>L4: (4) Simulating Ground Traffic on Airports Using Cellular Automata - The CAMAT-Model <u>Florian Mazur</u> and Michael Schreckenberg</p> <p>L4: (65) Validation of Voronoi Diagram based Direction Choices using Uni- and Bi-directional Trajectory Data <u>Yao Xiao</u>, Mohcine Chraibi and Armin Seyfried</p>
	<p>L5: (26) Vibrated Driven Vehicles Flowing Through Bottlenecks Germán Patterson, Federico Sangiuliano Jimka, Pablo König, Luis Pugnaroni, Angel Garcimartín, Iker Zuriguel, Pablo Fierens and <u>Daniel Parisi</u></p> <p>L5: (37) Analyzing the influence of gender and body height on the fundamental diagram <u>Jiayue Wang</u>, Maik Boltes, Armin Seyfried, Verena Ziemer, Jun Zhang, Antoine Tordeux and Wenguo Weng</p>
15:30	Coffee Break (B1167)
16:00	<p>Poster Session I (B1 Hallway 2) Session Chair: Pavel Hrabák</p>
17:30	Adjourn for Group Picture/Free Social Time/Scientific Committee Meeting in the Dean's Conference Room (2000B)

Friday, July 21 (Morning)											
7:30	Breakfast (B1167)										
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Friday, July 21 (Afternoon)	
12:00	Lunch (B1167)
13:30	<p>Lectern Session I-E: Empirical Studies on Vehicular Traffic Data: From Probe Vehicles to Detector Data (B1220) Session Chair: Alexandre Nicolas</p> <p>Lectern Session II-E: Advanced Methods in Collecting Pedestrian Flow Data (B1270) Session Chair: Reinhard Mahnke</p>
	<p>L1: (99) Effects of Trip Characteristics on Macroscopic Fundamental Diagram in Urban Network <u>Jisup Shim</u>, Jiho Yeo, Sujin Lee and Kitae Jang</p> <p>L1: (19) Mining the Social Media Data for a Bottom-Up Evaluation of Walkability Christian Berzi, <u>Andrea Gorrini</u> and Giuseppe Vizzari</p>
	<p>L2: (95) Macroscopic Fundamental Diagram Derivation for Collision Formation on Freeway Networks <u>Claire E. Silverstein</u>, Samer H. Hamdar, Seungmo Kang and Kitae Jang</p> <p>L2: (28) Hybrid Tracking System For Pedestrians In Dense Crowds <u>Jette Schumann</u>, Maik Boltes and Armin Seyfried</p>
	<p>L3: (56) F -> S -> F transitions in vehicle probe data <u>Sven-Eric Molzahn</u>, Boris Kerner, Hubert Rehborn, Sergey Klenov and Micha Koller</p> <p>L3: (40) Using Raspberry Pi for Measuring Pedestrian Visiting Patterns via WiFi Signatures in Uncontrolled Field Studies <u>Peter Kielar</u>, Pavel Hrabák, Marek Bukáček and André Borrmann</p>
	<p>L4: (98) Confidence Interval for Predicted Travel Time based on Probe Vehicle Data on Congested Freeways <u>Hyungjoo Kim</u> and Kitae Jang</p> <p>L4: (49) An application of new pedestrian tracking sensors for evaluating platform safety risks at Swiss and Dutch train stations <u>Jeroen Van den Heuvel</u>, Jasmin Thureau, Martin Mendelin, Rik Schakenbos and Serge Hoogendoorn</p>
15:00	Coffee Break (B1167)
15:30	<p>Poster Session II (B1 Hallway 2) Session Chair: Daichi Yanagisawa</p>
17:00	Adjourn (Preparation for Social Event)

Saturday, July 22													
7:30	Breakfast (B1167)												
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12:30	End of Conference												

Posters (B1 Hallway 2)	
Poster Session I: Thursday, July 20	
Session Chair: Pavel Hrabák	
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P2: (107) Speed Distribution based Approach for Shockwave Detection in a Connected Driving Environment	Connie Xavier , Amr Elfar, Alireza Talebpour and Hani S. Mahmassani
P3: (73) Development of a Decision-Making Model for Merging Maneuvers: A Game Theoretical Approach	Kyungwon Kang and Hesham Rakha
P4: (46) Analyzing the Influence of Connected Drivers on the Dynamic Traffic Assignment	Nils Rinke
P5: (7) Impact of Next-nearest Leading Vehicles on Followers' Driving Behaviours in Mixed Traffic	Akihito Nagahama , Daichi Yanagisawa and Katsuhiro Nishinari
P6: (102) Defining the Pedestrian Fundamental Diagram	Ernst Bosina and Ulrich A. Weidmann
P7: (38) Evaluation of Pedestrian Density Distribution with Respect to the Velocity Response	Marek Bukáček and Jana Vacková
P8: (35) Conflict Model of Evacuees and Vehicles on Pedestrian Crossing in the aftermath of Disaster	Kentaro Kumagai and Kenji Ono
P9: (53) Detecting Competitive Behaviors In Conflicts	Daichi Yanagisawa and Keisuke Yamazaki
P10: (89) Macroscopic Fundamental Diagram For Platforms	Winnie Daamen, Jeroen van den Heuvel , Victor L. Knoop and Serge P. Hoogendoorn
P11: (21) The Impact Of The Heterogeneity Of Crowds On The Pedestrian Traffic State In Bottlenecks	Dorine Duives , Winnie Daamen and Serge Hoogendoorn
P12: (100) Investigation of The Impact of Social Field Characteristic on Crowd Dynamics	Jingwan Fu , Boxiao Cao, Samer Hamdar and Tianshu Li
P13: (47) Improving Measurements of Pedestrian Dynamics using Deep Neural Networks	Alessandro Corbetta , Vlado Menkovski and Federico Toschi
P14: (10) An Empirical Study on Temporal Evolution of High Density Crowds	Muhammad Baqui and Rainald Lohner, (Michelle Isenhour)
P15: (24) Safety Training through Educational Online Computer Games on Crowd Evacuations?	Nikolai Bode
P16: (43) Simulating Assisted Evacuation using a Game Engine	Anass Rahouti, Ruggiero Lovreglio, Charitha Dias and Sélim Datoussaïd, (Jiahua Zhang)
P17: (61) Towards Faster Navigation Algorithms on Floor Fields	Benedikt Zönnchen , Gerta Koester and Matthias Laubinger
P18: (23) Investigating Conflict Solving Decisions in Shared Spaces	Federico Pascucci , Nils Rinke, Chris Schiermeyer, Bernhard Friedrich and Volker Berkhahn

Posters (B1 Hallway 2)	
Poster Session II: Friday, July 21	
Session Chair: Daichi Yanagisawa	
P1: (63) Deep Learning Based Model of Automated Vehicles	Jose Cazares and Alireza Talebpour
P2: (97) Longitudinal Train Dynamics Model for a Rail Transit Simulation System	Jinghui Wang and Hesham A. Rakha
P3: (12) Enhanced Calibration Method for Car-Following Models with Delay Used in Driving Simulators	Valentina Kurtc and Igor Anufriev
P4: (93) Extended GSOM model for multimodal transportation networks	Megan M. Khoshyaran and Jean-Patrick Lebacque
P5: (108) Numerical comparison between traffic flow models with and without adaptation behavior	Alma Mendéz Rodríguez , Rosa Velasco and Wilson Marques-Jr
P6: (62) Microscopic jam warning for automated driving	Sven-Eric Molzahn , Boris Kerner and Hubert Rehborn
P7: (52) Multi-attribute, Multi-class, Trip-Based, Multi-modal Traffic Network Equilibrium Model	Mostafa Ameli, Jean-Patrick Lebacque and Ludovic Leclercq
P8: (32) Effect of Crowd Heterogeneity on Single-file Movement of Pedestrians	Jun Zhang , Yao Xiao, Mohcine Chraibi and Armin Seyfried
P9: (14) Crossing Behaviour of Social Groups: Insights from Observations at Non-signalized Intersection	Andrea Gorrini , Luca Crociani, Giuseppe Vizzari and Stefania Bandini
P10: (64) Voronoi Model for Bidirectional Pedestrian Flows	Hisamoto Hiyoshi
P11: (96) Geometric constraint based pedestrian movement model on stairway	Juan Chen, Jian Ma and Siuming Lo, OR (Zhang Jun)
P12: (69) Prediction of Pedestrian Trajectories with Artificial Neural Networks	Antoine Tordeux , Mohcine Chraibi, Armin Seyfried and Andreas Schadschneider
P13: (50) Influence of pedestrian density on the use of the danger zone at platforms of train stations	Jasmin Thurau , Jeroen Van den Heuvel, Marcel van Ofwegen, Nicolas Keusen and Serge Hoogendoorn
P14: (110) Studying Cyclist Violations at Stop Sign-Controlled Intersections using Naturalistic Cycling Data	Arash Jahangiri, Mohammed Elhenawy, Hesham A. Rakha and Thomas Dingus
P15: (8) How Long Does It Take To Board An Airplane?	Reinhard Mahnke
P16: (44) Braess Paradox In Networks Of Stochastic Microscopic Traffic Models	Stefan Bittihn and Andreas Schadschneider
P17: (33) Higher-Order Continuum Model and Its Numerical Solution for Heterogeneous Traffic Flow with Non-lane discipline	Hari Krishna Gaddam and K. Ramachandra Rao
P18: (13) Algebraic and geometric aspects of flow modeling and prospects of natural-scientific applications	Marina Yashina , Alexander Buslaev, Valery Kozlov, Boris Chetverushkin and Alexander Tatashev

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