

XXIV – XXV Seminario Scientifico SIDT **Genova, June 15-17, 2022**



MOBILITY AND TRANSPORT MULTIMODALITY, SUSTAINABILITY, RESILIENCE

PROGRAM

	PROGRAM AT A GLANCE	
Wednesday, June 15, 2022	Thursday, June 16, 2022	Friday, June 17, 2022
	08:30-09:00 Registration	08:30-09:00 Registration
	09:00-10:00 Scientific sessions TRAFFIC MONITORING TRANSPORT SUSTAINABILITY I	09:00-10:00 Scientific sessions FREIGHT TRANSPORT II ROAD SAFETY
	10:00-10:30 Coffee break	10:00-10:30 Coffee break
	10:30-11:30 Keynote speech CHALLENGES IN MOBILITY AND TRANSPORT I	10:30-11:30 Keynote speeches CHALLENGES IN MOBILITY AND TRANSPORT II
	11:30-12:50 Scientific sessions PUBLIC TRANSPORT TRANSPORT SUSTAINABILITY II	11:30-12:50 Scientific sessions COVID-19 IMPACT ANALYSIS AUTONOMOUS AND ELECTRIC VEHICLES
13:30-14:30 Registration		12:50-13:00 Farewell speech
14:30-14:45 Welcome speech	12:50-14:30 Lunch	13:00-14:30 Lunch
14:45-16:50 Special session YOUNG RESEARCHERS	14:30-16:10 Scientific sessions SMART ROADS USERS BEHAVIOUR AND DEMAND ESTIMATION	
16:50-17:20 Coffee break	16:10-16:40 Coffee break	
	16:40-17:40 Scientific sessions FREIGHT TRANSPORT I TRANSPORT SUSTAINABILITY III	
18:00-20:00 General assembly of SIDT members		
	20:30-23:00 Gala dinner	

WEDNESDAY, June 15th

13:30 - 14:30	REGISTRATION	
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14:45 – 16:50	SPECIAL SESSION	San Salvatore	
	YOUNG RESEARCHERS		
14:45 ► 15:10 San Salvatore	Andreea Dumitru Analysis and development of pedestrian flow dynamics		
15:10 ▶ 15:35 San Salvatore	Marisdea Castiglione Investigating mobility patterns trough crowd-sourced activity data		
15:35 ▶ 16:00 San Salvatore	Andrea Baldassa, Federico Orsini, Riccardo Ceccato How do telework and COVID-19 impact MaaS adoption? Evidence from Padua, Ita	ly	
16:00 ▶ 16:25 San Salvatore	Francesca Bruno Investigating the combination of transtheoretical and the theory of planned beh an application to vehicle type choice behavior	avior paradigms:	
16:25 ▶ 16:50 San Salvatore	Rosita De Vincentis, Vincenza Rosati A data-driven approach for the combined study of mobility patterns and the bui an application to the case study of Brescia, Catania and Salerno (Italy)	lt environment:	

16:50 - 17:20	COFFEE BREAK	San Salvatore
10.50 - 17.20	COFFEE DREAK	Jan Jalvalui E

18:	00 – 20:00	GENERAL ASSEMBLY OF SIDT MEMBERS	San Salvatore

THURSDAY, June 16th

08:30 – 09:00 REGISTRATION

09:00 - 10:00	SCIENTIFIC SESSION	Room 4H		
	TRAFFIC MONITORING			
09:00 ► 09:20 Room 4H	Chiara Colombaroni, Gaetano Fusco, Natalia Isaenko, Marisdea Castiglione, Ernesto Ci Andrea Gemma, Marialisa Nigro A traffic model architecture for large scale road network monitoring and control	priani,		
09:20 ▶ 09:40 Room 4H	Gregorio Gecchele, Riccardo Ceccato, Riccardo Rossi, Massimiliano Gastaldi Application of Fuzzy Delphi Analytical Hierarchy Process for a traffic monitoring pro study in Venice	gram: a case		
09:40 ► 10:00 Room 4H	Andrea Gemma, Livia Mannini, Ernesto Cipriani, Umberto Crisalli Improving Urban Travel Time Estimation Using Gaussian Mixture Models			

09:00 - 10:00	SCIENTIFIC SESSION Ro	om 5H		
	TRANSPORT SUSTAINABILITY I			
09:00 ► 09:20 Room 5H	Orlando Marco Belcore, Antonio Polimeni, Antonio Comi, Massimo Di Gangi E-bike and sustainable transport systems: empirical evidence			
09:20 ► 09:40 Room 5H	Daniele Giubergia, Giovanni Tuveri, Francesco Piras, Eleonora Sottile, Italo Meloni Assessing the impact of normative messages in encouraging the use of sustainable mobili experimental study	ity. An		
09:40 ► 10:00 Room 5H	Luigi Pio Prencipe, Aleksandra Colovic, Leonardo Caggiani, Michele Ottomanelli Moving towards sustainable mobility: a network design model for a fair road capacity distribution			

10:00 - 10:30	COFFEE BREAK	Giardino/Porticato
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10:30 - 11:30	KEYNOTE SPEECH	Room 5H (& 4H streaming)
	CHALLENGES IN MOBILITY AND TRANSPO	ORT I
10:30 ▶ 11:30 Room 5H (& 4H streaming)	Ennio Cascetta The seventh transport revolution and the new challenges of	sustainable mobility

11:30 - 12:50	SCIENTIFIC SESSION	Room 4H
	PUBLIC TRANSPORT	
11:30 ► 11:50 Room 4H	Marco Petrelli, Stefano Carrese, Ernesto Cipriani, Andrea Gemma, Livia Mannini A Bus Network Design model under demand variation: a case study for the manabus network	agement of Rome

11:50 ► 12:10 Room 4H	Marco Bocciolone, Pierluigi Coppola, Francesco De Fabiis Economic and environmental Life-Cycle Assessment (LCA) of bus fleet transition towards clean-fuel
12:10 ► 12:30 Room 4H	Valeria J. Aranda Salgado, Roberto Notari, Lorenzo Mussone Evaluation of Robustness in underground networks
12:30 ► 12:50 Room 4H	Nadia Giuffrida, Leonardo Caggiani, Mario Binetti, Michele Ottomanelli A vertical equity indicator for public transport network design in urban areas

11:30 - 12:50	SCIENTIFIC SESSION	Room 5H
TRANSPORT SUSTAINABILITY II		
11:30 ► 11:50 Room 5H	Mario Marinelli, Mariano Gallo A GIS-based hybrid optimization model for the dynamic routing of vehicles in flexible services	e mobility
11:50 ► 12:10 Room 5H	Elisa Bertolini, Caterina Caramuta, Lorenzo Castelli, Giovanni Longo May info-mobility solutions contribute to increase sustainable transport connectivity learned from E-Chain project	/? Lessons
12:10 ► 12:30 Room 5H	Facundo Storani, Luca Di Costanzo, Luigi Pariota Quantifying transportation system contributions to urban air quality by means of Lar Regression models	nd Use
12:30 ► 12:50 Room 5H	Maria Vittoria Corazza, Paola Di Mascio, Antonio Musso Air pollution at airport areas: magnitude of the phenomenon and measures to mitiga	te it

12:50 - 14:30	LUNCH	Giardino/Porticato
12.00		0.0.0,0,0,0,0

14:30 – 16:10	SCIENTIFIC SESSION	Room 4H	
SMART ROADS			
14:30 ► 14:50 Room 4H	Marino Lupi, Daniele Conte, Alessandro Farina The assessment of the "acoustic capacity" of road infrastructures		
14:50 ▶ 15:10 Room 4H	Chiara Colombaroni, Gaetano Fusco, Natalia Isaenko, Zahra Lahijanian An Aggregate Calibration of Traffic Forecasting Tools for Smart Roads Implementation	1	
15:10 ► 15:30 Room 4H	Roberto Ventura, Benedetto Barabino, David Vetturi, Giulio Maternini Monitoring exceptional vehicles traffic on bridges by Weight In Motion (WIM) systems study of Brescia.	. The case	
15:30 ► 15:50 Room 4H	Alice Consilvio, Angela Di Febbraro, Nicola Sacco, Luca Bartoccini Optimal planning of maintenance work zones to mitigate the impact on highway traff	ic flow	

15:50 ▶ 16:10

Saeed Mansouryar, Chiara Colombaroni, Gaetano Fusco, Natalia Isaenko, Cristiano Massaroni, Riccardo Gobbo, Andrea Di Luca

A Deep Reinforcement Learning Approach for Intelligent Traffic Light Control

14:30 - 16:10	SCIENTIFIC SESSION Room 5H	
USERS BEHAVIOUR AND DEMAND ESTIMATION		
14:30 ► 14:50 Room 5H	Fiore Tinessa, Vittorio Marzano, Fulvio Simonelli, Prateek Bansal, Andrea Papola Assessing tastes, mathematical form of utility, substitution pattern and distribution of random terms with latent class structures at an individual level	
14:50 ▶ 15:10 Room 5H	Francesco Piras, Eleonora Sottile, Daniele Giubergia, Giovanni Tuveri, Italo Meloni How much of random taste heterogeneity in level of service variables is explained by psychosocial factors? Evidence from three case studies	
15:10 ► 15:30 Room 5H	Gabriele D'Orso, Alessandro Emilio Capodici, Marco Migliore An RP/SP survey to estimate the potential demand for a Demand Responsive Transport System in a suburb area of Palermo	
15:30 ► 15:50 Room 5H	Giovanni Tuveri, Francesco Piras, Eleonora Sottile, Italo Meloni Estimating value of travel time: a comparison between discrete choice models and artificial neural networks	
15:50 ► 16:10 Room 5H	Matteo Brunelli, Chiara Caterina Ditta, Maria Nadia Postorino SP surveys to estimate UAM airport shuttle demand	

16:40 - 17:40	SCIENTIFIC SESSION	Room 4H	
FREIGHT TRANSPORT I			
16:40 ► 17:00 Room 4H	Claudia Caballini, Stefano Cangelosi, Angela Carboni, Francesco Paolo Deflorio Micro-simulation of traffic flows in container terminals to face different managen and unpredictable events.	nent strategies	
17:00 ► 17:20 Room 4H	Luca Mantecchini, Caterina Malandri, Filippo Paganelli, Maria Nadia Postorino Effects of Automated Guided e-Vehicles on Ro-Ro Port Operations: Environmenta Operational Aspects	l and	
17:20 ▶ 17:40 Room 4H	Caterina Caramuta, Giovanni Longo War impacts and system resilience in the logistics chain: A case study in the North Region	n Adriatic	

16:40 - 17:40	SCIENTIFIC SESSION	Room 5H
	TRANSPORT SUSTAINABILITY III	
16:40 ▶ 17:00 Room 5H	Ennio Cascetta, Armando Cartenì, Ilaria Henke The economic, social and transportation impacts of ten years of highspeed rails market in Italy	ways competitive

17:00 ► 17:20 Room 5H	Angela Romano, Daniela Tocchi, Fiore Tinessa, Vittorio Marzano, Fulvio Simonelli Analysis of the carbon footprint of freight transport in the mass market retail sector: a case study in Campania (Italy)
17:20 ► 17:40 Room 5H	Agostino Nuzzolo, Paolo Beria Cost-benefit analysis: (numerical) comparison of consumer surplus computation methods

20:30 - 23:00	GALA DINNER	Acquario di Genova
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FRIDAY, June 17th

08:30 – 09:00 REGISTRATION

09:00 - 10:00	SCIENTIFIC SESSION	Room 4H	
	FREIGHT TRANSPORT II		
09:00 ► 09:20 Room 4H	Simona Gurrì, Jesús Molina Martínez, Bruno Dalla Chiara Specific energy consumption in air cargo and rail freight transport: a comparative based on new technological solutions to foster a more sustainable logistics	e assessment	
09:20 ▶ 09:40 Room 4H	Filippo Carrese, Chiara Colombaroni, Gaetano Fusco Accessibility Analysis of Urban Freight Distribution with Electric Vehicles incorpor	ating E-VRP	
09:40 ▶ 10:00 Room 4H	Daniela Tocchi, Christa Sys, Andrea Papola, Fiore Tinessa, Fulvio Simonelli, Vittorio Hypergraph-based centrality metrics for maritime container service networks: A vapplication		

09:00 - 10:00	SCIENTIFIC SESSION	Room 5H
	ROAD SAFETY	
09:00 ► 09:20 Room 5H	Vincenzo Punzo, Gaetano Zaccaria, Marcello Montanino Metastability and crashes in car-following dynamics	
09:20 ▶ 09:40 Room 5H	Sina Shaffiee Haghshenas, Giuseppe Guido, Vittorio Astarita, Alessandro Vitale Prediction of Level of Road Crash Severity using a New Hybrid Grey Wolf optimizat Artificial Neural Network	ion-based
09:40 ► 10:00 Room 5H	Federico Orsini, Mariana Batista, Bernhard Friedrich, Massimiliano Gastaldi, Riccardo Before-after safety analysis of a shared space implementation	o Rossi

10:00 – 10:30 COFFEE BREAK	Giardino/Porticato
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10:30 - 11:30	KEYNOTE SPEECHES	Room 5H (& 4H streaming)
	CHALLENGES IN MOBILITY AND TRANSPORT II	
10:30 ► 11:00 Room 5H (& 4H streaming)	Antonella Trombetta TBD	
11:00 ► 11:30 Room 5H (& 4H streaming)	Giovanni Bocchetti TBD	

11:30 - 12:50	SCIENTIFIC SESSION	Room 4H
	COVID-19 IMPACT ANALYSIS	
11:30 ▶ 11:50 Room 4H	Eleonora Sottile, Francesco Piras, Giovanni Tuveri, Italo Meloni How did the Covid-19 pandemic change women's travel behaviour? A three-wave par Italy	nel survey in
11:50 ▶ 12:10 Room 4H	Gianfranco Fancello, Antonio Comi, Patrizia Serra, Francesco Piras, Serena Sedda Shopping mobility after the covid-19 pandemic: new profiles of customers' behavior	S
12:10 ▶ 12:30 Room 4H	Caterina Caramuta, Cristian Giacomini, Giovanni Longo, Carlo Poloni Managerial decisions to recover from Covid-19 disruption: A multi-objective optimiza approach applied to public transport operators	ation
12:30 ► 12:50 Room 4H	Gianfranco Fancello, Patrizia Serra, Daniel Mark Vitiello European air transport market performance during the covid-19 pandemic: a PCA-DE application to airline companies	ĒΑ

11:30 - 12:50	SCIENTIFIC SESSION Room 5H
	AUTONOMOUS AND ELECTRIC VEHICLES
11:30 ▶ 11:50 Room 5H	Roberta Di Pace, Facundo Storani, Rui Jiang, Stefano de Luca Global consistency in hybrid traffic flow models: networks applications and analysis in mixed traffic flow with connected and automated vehicles
11:50 ▶ 12:10 Room 5H	Pierluigi Coppola, Fulvio Silvestri, Francesco De Fabiis Hybrid choice modeling analysis of passengers' willingness-to-adopt autonomous driving.
12:10 ► 12:30 Room 5H	Filippo Carrese, Chiara Colombaroni, Gaetano Fusco, Mostafa Mohammadi, Golman Rahmanifar, Maria Pia Valentini, Valentina Conti, Matteo Corazza A Simulation-Optimization Framework for Electric Vehicles Routing Problem with Time Window and Charging Station
12:30 ▶ 12:50 Room 5H	Davide La Gamba, Francesco Paolo Deflorio, Luis Montesano, Angela Carboni, Miriam Pirra, Maurizio Arnone Modeling users' preference in charging electric vehicles

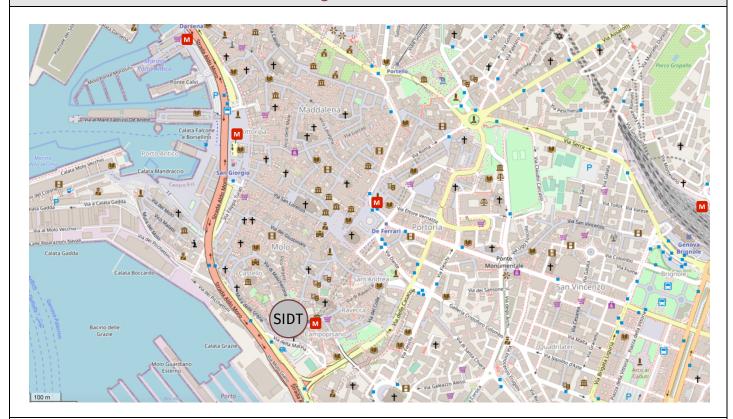
12:50 – 13:00 FAREWELL SPEECH Room 5H (& 4H	streaming)
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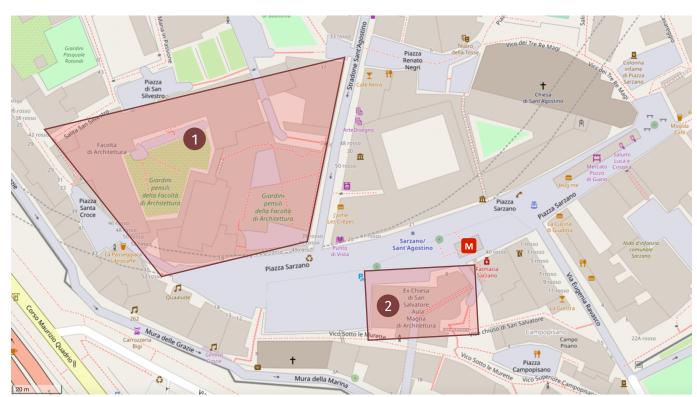
13:00 – 14:30 LUNCH Giardino/Porticato
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VENUE

UNIVERSITÀ DI GENOVA – DIPARTIMENTO DI ARCHITETTURA E DESIGN

Stradone Sant'Agostino 37 – 16123 Genova (GE)





Room 4H – Room 5H – Giardino/Porticato

2 San Salvatore