RSS2026

10th International Conference on

Road Safety & Simulation

23-26 June 2026, Naples, Italy

FINAL PROGRAMME

Contents

General Information

Congress Venue

Piazzale Tecchio 80, Naples

The Conference will be held at **the Polytechnic School and Basic Sciences of the University of Naples Federico II.** The central location and architectural significance of the complex make it a prestigious venue for academic and professional events. The School of Engineering of Naples, founded in 1811 by Gioacchino Murat with the name of "School of Bridge and Road Applications", is the oldest in Italy and has played a crucial role in the scientific and technological development of Southern Italy.
The Conference welcome, keynote speeches, and closing ceremony will be held in the Main Room "Leopoldo Massimilla", at the first floor of the School. These events will be projected in the adjacent Main Room "Scipione Bobbio", at the first floor, and in the Rooms D, E, H and L at the second floor.

Public transportation

The **Conference Venue** can be easily reached by metro using the following lines:

- **Metro Line 2:** From Napoli Centrale / Piazza Garibaldi Station, take Metro Line 2 towards Pozzuoli or Campi Flegrei and get off at Napoli Campi Flegrei station. The station is located very close to Piazzale Tecchio, and the Faculty of Engineering can be reached on foot in just a few minutes.
- **Metro Line 6:** Alternatively, you can take Metro Line 6, which is particularly convenient for those coming from the Municipio, Chiaia, Mergellina, or Fuorigrotta areas. The nearest stop is Mostra, the terminus of Line 6, located within walking distance of Piazzale Tecchio. The stops on Line 6 are: Municipio, Chiaia, San Pasquale, Arco Mirelli, Mergellina, Lala, Augusto, and Mostra.

Wi-Fi info

During the conference, Wi-Fi access will be available by entering the following credentials:

- **SSID:** ROAD
- **Password:** Simul@t1on

Local Organizing Committee

- **Alfonso Montella**, University of Naples Federico II, General Chair
- **Francesco Galante,** University of Naples Federico II, Scientific Program Chair
- **Filomena Mauriello,** University of Naples Federico II, Scientific Program Co-Chair
- **Mariano Pernetti,** University of Naples Federico II, Scientific Program Co-Chair
- **Maria Rella Riccardi,** University of Naples Federico II, Scientific Program Co-Chair
- **Antonella Scarano,** University of Naples Federico II, Conference Organization
- **Simone Fucito,** University of Naples Federico II, Workshops Organization
- **Roberta Maione**, Sistema Congressi, Finances and Social Events
- **Roberto Alonzi**, Be Creative, Media Partner

Permanent Steering Committee

- **Fabrizio D'Amico**, Roma Tre University, Italy (Chair)
- **Andrea Benedetto**, Roma Tre University, Italy
- **Elias M. Choueiri**, WSO, USA
- **Stéphane Espié**, University of Paris-Est, France
- **Nikiforos Stamatiadis**, University of Kentucky, USA
- **Andrew Tarko**, Purdue University, USA
- **George Yannis**, National Technical University of Athens, Greece

Tuesday, June 23 – Programme at a Glance

From	To	Event type	Event name	Location
09:00	10:00	Registration		
09:30	12:30	Workshop	Driving Simulation for Road Safety: Immersive Simulations for Vulnerable Road Users	Hall Leopoldo Massimilla
09:30	12:30	Workshop	Literature Synthesis and Bibliometric Analysis: A Hands-On Workshop	Hall Scipione Bobbio
11:00	12:30	Workshop	Reality Data and AI for Road Safety Inspections and Analysis	Room D
09:30	13:30	Technical Tour	SMA Road Safety	
12:30	13:30	Lunch		
13:30	16:30	Workshop	The PIARC Safe System Approach: New insights in the Fourth Edition of the Road Safety Manual	Hall Leopoldo Massimilla
13:30	16:30	Workshop	Predictive Approaches for Safer Urban Environment (PHOEBE Project Final Results)	Hall Scipione Bobbio
13:30	16:30	Technical Tour	The driving simulator of the University of Naples' Road Safety Laboratory	
16:30	16:45	Presentation	Art Stations of Metro Napoli	Hall Leopoldo Massimilla
16:45	17:00	Coffee Break		
17:00	18:30	Technical Tour	Tour of Art Stations of Metro Napoli	
17:30	19:00	Visit of the Museum of Paleontology	San Marcellinus and Festus	
17:30	19:00	Visit of the Museum of Mineralogy	San Marcellinus and Festus	
17:30	19:00	Visit of the Museum of Zoology	San Marcellinus and Festus	
19:00	20:00	Concert by the "Cantori di Posillipo"	San Marcellinus and Festus	
20:00	22:00	Welcome Reception	Cloister of San Marcellinus and Festus	

Wednesday, June 24 – Programme at a Glance

From	To	Event type	Event name	Location
08:00	09:00	Registration		
09:00	10:45	Opening Ceremony and Welcome Addresses		Hall Leopoldo Massimilla
10:45	11:15	Coffee Break		
11:15	12:30	Keynote Speech	Prof. Dr. Mohamed Abdel-Aty, University of Central Florida Enhancing safety analytics using connected vehicles, traffic signal data and generative AI	Hall Leopoldo Massimilla
12:30	14:00	Lunch		
14:00	15:45	Lectern session 1	Global Forum for Road Traffic Safety at United Nations Economic Commission for Europe, part 1	Hall Leopoldo Massimilla
14:00	15:45	Lectern session 2	Microscopic traffic simulation	Hall Scipione Bobbio
14:00	15:45	Lectern session 3	Pedestrian safety	Room D
14:00	15:45	Lectern session 4	Surrogate measures of safety	Room E
14:00	15:45	Lectern session 5	Speed limits implementation and evaluation	Room H
14:00	15:45	Lectern session 6	Driving simulation studies	Room L
14:00	15:45	Poster session 1	Data analysis and safety assessment	Atrium
15:45	16:15	Coffee Break		
16:15	18:00	Lectern session 7	Global Forum for Road Traffic Safety at United Nations Economic Commission for Europe, part 2	Hall Leopoldo Massimilla
16:15	18:00	Lectern session 8	Speed management	Hall Scipione Bobbio
16:15	18:00	Lectern session 9	Cognitive and psychophysiological factors in driving safety, part 1	Room D
16:15	18:00	Lectern session 10	Cycling safety	Room E
16:15	18:00	Lectern session 11	Road safety policies and strategies	Room H
16:15	18:00	Lectern session 12	Tunnels and drainage systems	Room L
16:15	18:00	Poster session 2	Safety performances of roundabouts	Atrium
18:30	19:00	Gala Dinner	Pick-up by Bus at Conference Venue and transfer to Bacoli at Nabilah	
19:00	00:00	Gala Dinner	Aperitif and dinner at sunset beach, Pick-up by Bus and transfer to Naples	

Thursday, June 25 – Programme at a Glance

From	To	Event type	Event name	Location
08:00	09:00	Registration		
09:00	09:45	Keynote Speech	Prof. Dr. Tom Brijs, Hasselt University From raw driving data to actionable insight: computer vision and generative AI for next-generation road safety analytics	Hall Leopoldo Massimilla
10:15	10:45	Coffee Break		
10:45	12:30	Lectern session 13	Safe speeds	Hall Leopoldo Massimilla
10:45	12:30	Lectern session 14	Road safety in urban areas	Hall Scipione Bobbio
10:45	12:30	Lectern session 15	Road safety management	Room D
10:45	12:30	Lectern session 16	Network-wide road safety assessment	Room E
10:45	12:30	Lectern session 17	Work-zone safety	Room H
10:45	12:30	Lectern session 18	Safety Perceptions of CAVs	Room L
10:45	12:30	Poster session 3	Safety issues in Low and Middle Income Countries	Atrium
12:30	14:00	Lunch		
14:00	15:45	Lectern session 19	Urban and sustainable mobility	Hall Leopoldo Massimilla
14:00	15:45	Lectern session 20	Forgiving roadsides	Hall Scipione Bobbio
14:00	15:45	Lectern session 21	Advanced Driver Assistance Systems	Room D
14:00	15:45	Lectern session 22	Pavement design and evaluation	Room E
14:00	15:45	Lectern session 23	Cognitive and psychophysiological factors in driving Safety, part 2	Room H
14:00	15:45	Lectern session 24	Safety of powered two-wheelers	Room L
14:00	15:45	Poster session 4	Safety of vulnerable road users	Atrium
15:45	16:15	Coffee Break		
16:15	18:00	Lectern session 25	Pedestrian safety	Hall Leopoldo Massimilla
16:15	18:00	Lectern session 26	Using EEG and Eye-Tracking Data	Hall Scipione Bobbio
16:15	18:00	Lectern session 27	Safety at intersections and pedestrian crossings	Room D
16:15	18:00	Lectern session 28	Road safety countermeasures and evaluation	Room E
16:15	18:00	Lectern session 29	The era of CAVs and smart motorways	Room H
16:15	18:00	Lectern session 30	Virtual reality–simulated environments	Room L
16:15	18:00	Poster session 5	Towards the Safe System approach, Part 1	Atrium
20:00	22:30	Pizza Dinner	Pizza tasting on the waterfront	

Friday, June 26 – Programme at a Glance

From	To	Event type	Event name	Location
08:00	09:00	Registration		
09:00	10:45	Lectern session 31	Machine Learning for safety analysis	Hall Leopoldo Massimilla
09:00	10:45	Lectern session 32	Traffic conflicts	Hall Scipione Bobbio
09:00	10:45	Lectern session 33	AI-based video analytics for road safety issues	Room D
09:00	10:45	Lectern session 34	Traffic flow analysis	Room E
09:00	10:45	Lectern session 35	Naturalistic driving data and applications	Room H
09:00	10:45	Lectern session 36	Road Safety Management	Room L
09:00	10:45	Poster session 6	Towards the Safe System approach, Part 2	Atrium
10:45	11:15	Coffee Break		
11:15	13:00	Lectern session 37	Video analysis and digital image processing for vulnerable road users	Hall Leopoldo Massimilla
11:15	13:00	Lectern session 38	Drivers' behaviour	Hall Scipione Bobbio
11:15	13:00	Lectern session 39	Road restraint systems	Room D
11:15	13:00	Lectern session 40	Safety modelling	Room E
11:15	13:00	Lectern session 41	Selection and prioritization of safety countermeasures	Room H
11:15	13:00	Lectern session 42	Automated driving field	Room L
11:15	13:00	Poster session 7	Towards the Safe System approach, Part 3	Atrium
13:00	14:30	Lunch		
14:30	15:00	Awards		Hall Leopoldo Massimilla
15:00	16:00	Closing Ceremony		Hall Leopoldo Massimilla

Tuesday, June 23 – Workshops

Driving Simulation for Road Safety: Immersive Simulations for Vulnerable Road Users

09:30 — 12:30
Room: Hall Leopoldo Massimilla
Co-Chairs: Jean-Michel Auberlet, Gustave Eiffel University, France; Francesco Galante, University of Naples Federico II, Italy; Hocine Imine, Gustave Eiffel University, France

This workshop aims to explore methods and tools for effectively using immersive simulations related to vulnerable road users, such as cyclists and pedestrians. Attention will be devoted on analysing interactions between road users, especially VRUs. The workshop will provide insights into behavioural analysis and technological advancements aimed at promoting safer road environments.
The program includes three expert talks followed by small-group discussions. Participants will share knowledge, experiences, and perspectives on future experimental designs.

Speakers:

- Hocine Imine, Gustave Eiffel University – **Risk indicators for cyclists**
- Jean-Michel Auberlet, Gustave Eiffel University – **Interactions within pedestrians and cyclists**
- Francesca De Crescenzio, University of Bologna **– Use of VR for risk assessment from a pedestrian's perspective**

Group discussion topics:

- Studying cyclists' safety with bicycle simulators: advantages and drawbacks
- Bicycle instrumentation and dynamic bike simulators
- Interactions among road users using VR tools
- Stakes for co-simulation
- Walking simulators for long trips

Literature Synthesis and Bibliometric Analysis: A Hands-On Workshop

09:30 — 12:30
Room: Hall Scipione Bobbio
Co-Chairs: Massimo Aria, University of Naples Federico II, Italy; Corrado Cuccurullo, University of Campania Luigi Vanvitelli, Italy

The growing volume of scientific publications is increasing at such a rapid pace that staying updated is becoming increasingly challenging. Moreover, the emphasis on empirical contributions often fragments knowledge production, hindering its accumulation and advancement. Stand-alone research reviews are therefore playing a critical role in synthesizing findings from prior studies, effectively leveraging the existing knowledge base, advancing the frontiers of research, and providing evidence-based recommendations for practice. Researchers use a variety of approaches for research synthesis, both qualitative and quantitative. Among these, bibliometric methods stand out as tools to conduct systematic, objective, reliable, transparent, and reproducible reviews. Bibliometric analyses are particularly suited for structured examinations of large datasets (big data). This workshop has two main objectives: (1) to introduce participants to major sources of scientific metadata and their specific features, and (2) to demonstrate and apply bibliometric analysis techniques for research synthesis through the use of the Bibliometrix software and its web-based application, Biblioshiny. Participants will be guided through the complete process, from data collection and analysis to visualization, culminating in the creation of a bibliometric research report on a topic of their choice. The interactive and hands-on approach ensures that participants acquire the expertise to effectively implement bibliometric techniques in their research projects.

The workshop will cover the following key aspects:

- Fundamentals of Informetrics and Bibliometrics
- Introduction to Bibliometrix and Biblioshiny as analytical tools
- Types of literature reviews and the SAAS workflow (Searching, Appraising, Analyzing, Synthesizing)
- Three levels of bibliometric analysis: Journals, Authors, and Documents
- Understanding three knowledge structures: conceptual, intellectual, and social
- Practical applications using Biblioshiny

Reality Data and AI for Road Safety Inspections and Analysis

11:00 — 12:30
Room: D
Chair: Susie Ye, Bentley, China

This hands-on workshop introduces participants to advanced workflows for road safety inspections using reality data and artificial intelligence. Leveraging Bentley applications such as **iTwin Capture Manage & Extract,** attendees will explore how to efficiently process and analyze data from multiple sources, including mobile laser scanning, airborne LiDAR, drone-based reality meshes, and orthophotos.
The session will demonstrate how rich reality data can be transformed into actionable insights for infrastructure assessment. Participants will learn how to identify key road safety indicators such as pavement cracks, perform clearance analysis, and extract critical information for asset inventory, including trees, poles, and traffic signs.
In addition, the workshop will highlight how these datasets support more effective asset management workflows by enabling accurate, data-driven decision-making. A key focus will be on the integration of AI to automate detection processes, improve analysis speed, and enhance overall inspection accuracy.

Participants are required to download **iTwin Capture Manage & Extract** in advance to participate in the practical exercises. No prior experience with Bentley software is necessary. Students and academic members are asked to follow the step-by-step guide (https://www.rss2026.org/wp-content/uploads/2026/04/Bentley-Education-Hub-Instructions-RSS2026.pdf) to install the required software prior to the session. Non-academic participants must first register their email address at https://ims.bentley.com/ and then contact Marta Kaczmarek at Marta.Kaczmarek@bentley.com, indicating "Bentley Workshop at RSS2026" in the message and providing their name and company affiliation, to request a 30 days evaluation license. Workshop datasets will be distributed by email prior to the session. Participants are expected to download the datasets in advance and ensure that they are accessible on their laptops during the workshop.

The PIARC Safe System Approach: New insights in the Fourth Edition of the Road Safety Manual

13:30 — 16:30
Room: Hall Leopoldo Massimilla
Chair: Roberto Arditi, PIARC Italy

This workshop will focus on the latest updates to the PIARC Road Safety Manual (RSM) (https://roadsafety.piarc.org/en), emphasizing its new features, technical depth, and practical applications aimed at advancing towards the worldwide adoption of the Safe System Approach.
Participants will be introduced to the evolution of the manual, which builds upon the foundations of the 1st edition of the RSM (2003) while integrating contemporary knowledge, advanced methodologies, and up-to-date guidelines on road safety. The 4th edition of the RSM (2025) includes more comprehensive technical content and supporting documents that reflect the latest international best practices.
Through presentations and discussions, participants will gain a deeper understanding of the structure, content, and key innovations of the updated manual, and learn how it can be effectively applied to strengthen road safety management, guide infrastructure projects, and inform policy decisions across different contexts, ultimately contributing to safer and more sustainable roads.

Speakers:

- Roberto Arditi, Chair of the Italian PIARC Road Safety Technical Committee – **Introduction**
- Emanuela Stocchi, PIARC President – **General presentation of PIARC**
- Kaouther Matcha, Technical Advisor for Mobility strategic theme **– Presentation of the RSM**
- Paola Tiberi, Road Engineer - FRED Engineering – **Updates and enhancements to the RSM developed by FRED Engineering**
- Andrea Paliotto, Research fellow, University of Florence – **Crash contributing factors analysis using PIARC RSM Appendix 10.3**
- Alessandro Calvi, Professor, University of Roma Tre **– RSM - Target Audience and Applications from University**
- Edoardo Mazzia, Managing Director, FRED Engineering – **Application and future developments of the RSM in Italy**
- Roberto Arditi, Chair of the Italian PIARC Road Safety Technical Committee – **Closing session**

Predictive Approaches for Safer Urban Environment (PHOEBE Project Final Results)

13:30 — 16:30
Room: Hall Scipione Bobbio
Chair: Niklas Schmalholz, POLIS, Belgium

This event is the final workshop of the Horizon Europe Project PHOEBE (https://phoebe-project.eu/). The aim of this workshop is to present the innovative PHOEBE framework, developed to help cities forecast and improve urban road safety through the integration of state-of-the-art safety tools. A holistic summary of the methodological pillars of the project will be provided, focusing on (i) microsimulation tools, (ii) road safety assessment, (iii) road user behavioral modelling and (iv) socioeconomic analyses, augmented by driver telematics and intelligent Machine Learning applications, with emphasis on their interconnections and integration.
The workshop will present key outcomes from pilot implementations and simulations in Athens, Valencia and the West Midlands. The presentations will also showcase the interactive tools developed within PHOEBE, demonstrating how the framework enhances microsimulation for predictive understanding of safety impacts for vulnerable road users and decision-making focused on safety outcomes, and how evidence-based recommendations and tools that other European cities can adopt for strategic planning and policymaking are obtained. The event will also celebrate collaborative achievements across consortium partners and promote exchange with stakeholders to maximize the scientific and societal impacts of the project outputs at its conclusion in July 2026.

Tuesday, June 23 – Technical Tours

SMA Road Safety

09:30 — 13:30

Pick-up will be at the Conference Venue (Piazzale Tecchio 80) at 9:30. Then, there will be a transfer by coach to the SMA Road Safety manufacturing plant in Marcianise (Caserta). Arrival back at the Conference Venue will be at 13:30.

Participants will have the opportunity to take part in an exclusive technical and industrial visit to SMA Road Safety, a leading European manufacturer of road safety solutions designed to protect lives and enhance infrastructure performance (www.smaroadsafety.com).The visit will offer an inside look at SMA's production facilities, where advanced engineering, certified testing processes and industrial manufacturing converge to develop innovative safety systems for roads, highways and work zones. SMA's product portfolio includes crash cushions, end terminals, longitudinal barriers, barrier gates, monitoring systems, advanced Weigh-In-Motion (WIM) and solutions for traffic monitoring and infrastructure preservation. Through continuous research, compliance with international standards and close cooperation with road authorities and infrastructure operators, SMA designs solutions that combine safety, durability and sustainability. Founded in Italy and active in international markets, the company supports public and private stakeholders in addressing evolving mobility challenges, contributing to safer and more resilient transport networks worldwide. This visit represents a unique opportunity to experience firsthand how industrial innovation, certified technologies and applied research translate into real-world road safety solutions.

The Driving Simulator of the University of Naples' Road Safety Laboratory

13:30 — 16:30

Via Claudio, 21, Building 5b

Pick-up will be at the Conference Venue (Piazzale Tecchio 80) at 13:30. Participants will be divided in small groups and will walk five minutes guided by the Organizing Committee Staff to the Road Safety Laboratory (https://www.dicea.unina.it/en/laboratori-dicea/lss/).

The technical tour will be held at the Road Safety Laboratory of the University of Naples Federico II. The visit will introduce participants to the Laboratory's new-generation dynamic driving simulator, powered by VI-grade, whose installation was completed in early 2026.
The simulator is a full-scale system composed of a real vehicle cockpit mounted on a 6-DOF hexapod motion platform and surrounded by a 240° cylindrical projection screen. During the tour, RSS attendees will see the simulator "in action", with practical demonstrations based on urban and rural driving scenarios. Participants will also receive a brief presentation of the simulator's hardware–software architecture, current technical features, and future potential, together with an overview of its applications, ongoing developments, and research activities in the fields of human factors and road safety.

Art Stations of Metro Napoli

16:30 — 16:45

Room: Hall Scipione Bobbio

Maria Corbi, Head of Artistic Heritage of Azienda Napoletana Mobilità (ANM) - Naples Public Transport Company, will deliver a presentation on the Metro System of the City of Naples.

Tour of Art Stations of Metro Napoli

17:00 — 18:30

Among its wonders, Naples has one of the largest free and public access museums around the world: the stations of line 1 of the underground. The result is the so-called art Metro line (together with some stops on line 6) in which stations, designed by great architects, and installations by world artists coexist daily. Most of these works are accessible every day as we move through the city. There are currently 15 stations of the art metro, collecting around two hundred works of art. The underground network connecting the city centre and the surrounding suburbs is still being expanded through the construction of new stations, but has already received numerous international awards. A guided tour of the most beautiful stations will be carried out.

Visit of the Museums of Paleontology, Mineralogy and Zoology

17:30 — 19:00
San Marcellinus and Festus

There will be two pick-up points:

a) Conference venue, 17:00. Participants will be accompanied by members of the Organizing Committee and travel by Metro Lines 6 and 2 to the main campus of the University of Naples, located at Corso Umberto I, 40. After a brief visit to the University, participants will enjoy a unique guided tour of the University's most beautiful museums.

b) Main entrance of the University of Naples (Corso Umberto I, 40), 17:30.

The scientific museums of the University of Naples preserve historic collections of great value, established between the 19th and 20th centuries and enriched over time through acquisitions, donations, and scientific expeditions.
The Museum of Paleontology, founded in 1932, houses around 50,000 fossil specimens, including important Campanian and international collections. After the damage caused by the bombings of 1941 and the earthquake of 1980, it was restored and reopened in the 1990s. Today, it is a national study center, with exhibition rooms, multimedia tools, and an educational laboratory.
The Royal Mineralogical Museum, established in 1801 by Ferdinand IV of Bourbon, holds over 46,000 specimens, of which about 11,000 are on display. The museum itinerary illustrates the history of the Earth through collections of Campanian tuffs, Vesuvian minerals, crystals, ornamental stones, scientific instruments, and meteorites.
The Zoological Museum, founded in 1813 by Joachim Murat, preserves zoological and anatomical collections of great historical and scientific importance. Despite the severe damage suffered during the Second World War, the museum still holds unique specimens, including extinct species and famous exhibits such as the Taranto Whale, the Posillipo Seal, and the Portici Elephant.
Overall, these museums represent a scientific, historical, and artistic heritage of international significance, essential for research, education, and the promotion of natural history.

Concert by the “Cantori di Posillipo”

19:00 — 20:00
San Marcellinus and Festus

Founded and directed by Ciro Visco in 1978, I Cantori di Posillipo have long represented a point of reference in Neapolitan musical life. Their repertoire ranges from the Middle Ages to the contemporary age.
Since 1999, the Association has been officially recognized as a cultural institution of regional interest and in 2007 it was included in the Regional Register of Entertainment Organizations.
Under the passionate initiative of President Santina Montella Picone, I Cantori di Posillipo have performed about 500 concerts in Italy and abroad in prestigious venues and theaters such as the Quirinal Palace, the Cathedral of Brussels, the European Parliament Hall, the Italian Cultural Institute in Budapest, the San Carlo Theatre in Naples, the Opera House of Rome, the Teatro Lirico of Milan, and the Sistina Theatre in Rome.
I Cantori di Posillipo have performed in the presence of His Holiness Pope John Paul II, His Holiness Pope Francis and the Presidents of the Italian Republic Scalfaro, Ciampi and Napolitano, in addition to numerous other Italian and international authorities.
Since 2004, the choir has been conducted by Gaetano Raiola, who has developed for Solo, Choir and Piano a new anthology of “Classic Neapolitan Songs”, an anthology of “Salon Romances and Songs (1835 – 1976)”, and well-known works from the Christmas tradition.
Since 1999, the choir has performed the Christmas concert every December 25th at the Cathedral of Naples in the presence of the Cardinal and city and regional authorities.
Throughout its long history, I Cantori have consistently supported and promoted the artistic growth of young people. The most recent project for young people began on March 29, 2022, with a performance of Karl Jenkins’ Requiem by the Choir and Orchestra of I Cantori di Posillipo at the Basilica of Santa Maria del Carmine Maggiore. The concert featured six young musicians including Giovanbattista Cutolo, to whom a prize was dedicated following the tragic attack of which he was a victim.

Wednesday, June 24
Opening Ceremony and Welcome Addresses

Opening Ceremony and Welcome Addresses

09:00 — 10:45
Room: Hall Leopoldo Massimilla

- **Alfonso Montella –** RSS2026 General Chair-Introducing
- **Jean Todt –** United Nations Special Envoy for Road Safety (Video Message)
- **Matteo Lorito –** Rector of the University of Naples Federico II
- **Gaetano Manfredi –** Mayor of the City of Naples
- **Andrea Prota –** President of the Polytechnic and Basic Sciences School, University of Naples Federico II
- **Francesco Pirozzi –** Director of the Department of Civil, Architectural and Environmental Engineering, University of Naples Federico II
- **Sergio Moschetti –** Director for Motorways and Oversight of Motorway Concession Contracts, Ministry of Infrastructure and Transport
- **Domenico Capomolla –** Director of the National Agency for the Safety of Railways, Roads and Motorways
- **Arrigo Giana –** CEO of Motorways for Italy
- **Marco Ludovico –** Director of Communications at Anas
- **Emanuela Stocchi –** President of PIARC World Road Association
- **Luciana Iorio –** Chair of the Global Forum for Road Traffic Safety, United Nations Economic Commission for Europe
- **Fabrizio D'Amico –** Chair of the Road Safety and Simulation Permanent Steering Committee

Wednesday, June 24 – Keynote Speech

Enhancing safety analytics using connected vehicles, traffic signal data and generative AI

11:15 — 12:30
Room: Hall Leopoldo Massimilla
Keynote Speaker: Prof. Dr. Mohamed Abdel-Aty, Editor Emeritus of Accident Analysis and Prevention
Trustee Chair of the Department of Civil Engineering and Construction Engineering, University of Central Florida (UCF)

Road safety research is rapidly evolving through the adoption of innovative methodologies, emerging data sources, and advanced analytical applications. This presentation highlights several cutting-edge approaches developed through recent projects conducted by the UCF SST Lab.

The presentation explores the use of connected vehicle data for analyzing crash frequency on freeways and arterial roadways, predicting crash likelihood, and assessing speed patterns and traffic conflicts. It also demonstrates how Automated Traffic Signal Performance Measures (ATSPM) data, traditionally used for traffic operations and performance monitoring, can be processed and leveraged for safety-related applications.

In addition, the presentation showcases a data-fusion framework that integrates multiple sensing technologies, including 3D radar and camera systems, to support intersection safety analysis. Finally, it discusses emerging opportunities for applying generative AI to transportation safety research and practice.

The presentation concludes with an overview of the analytical methods employed, key findings from selected applications, and recommendations for future research and implementation.

Wednesday, June 24 – Lectern Sessions

Lectern session 1

Global Forum for Road Traffic Safety at United Nations Economic Commission for Europe, part 1

Global Road Safety Governance and Innovation: Aligning science, policy, innovation for a safer society on the move

14:00 — 15:45

Room: Hall Leopoldo Massimilla

Chair: Luciana Iorio, United Nations Economic Commission for Europe, Italy

This special session will bring together leading experts from government, academia, and corporate to explore the future of road safety policy in a rapidly evolving mobility landscape, mirroring the United Nations Economic Commission for Europe (UNECE) Global Forum for Road Traffic Safety Agenda.

Featured speakers of part 1:

- **Placido Migliorino**, Ministry of Infrastructure and Transport, Italy
- **Kenneth Fors**, Swedish Transport Agency, Sweden
- **Ava Goodman**, St. Andrews University, United Kingdom
- **Simon Caduff**, Federal Roads Office, Switzerland
- **Robert Ringsell**, Department for Transport, United Kingdom
- **Bryant Walker Smith**, University of South Carolina, USA
- **Tim Goodman**, Amazon, USA
- **Stephen Dempsey**, Amazon, USA
- **Clara Sanchez Lopez**, IRU, Switzerland

Lectern session 2

Microscopic traffic simulation

14:00 — 15:45

Room: Hall Scipione Bobbio

Chair: Giuseppina Pappalardo, University of Catania, Italy

ID	Title	Authors
28	Towards a micro-simulation of traffic safety: Analyzing the Discriminative Power of Surrogate Measures	Andreas Leich, Ronald Nippold and Peter Wagner
91	Bridging Design and Assessment: A BIM-to-Microsimulation Framework	Goker Altuntas, Senne Ools and Ali Pirdavani
130	Safety and Geometric Evaluation of a Modified Diverging Diamond Interchange Using Microsimulation	Nawaf Alnawmasi, Ahmed Hassan and Apostolos Anagnostopoulos
196	Microsimulation based Impact Assesment of Adaptive Traffic Signal Control on Traffic Operations and Safety at Urban Signalized Intersections using Extreme Value Theory	Vishal Patel, Saksham Grewal, Shriniwas Arkatkar and Said Easa
236	A Hybrid Evolutionary Algorithm and Reinforcement Learning (EA-RL) Approach for Calibrating Emergency Medical Vehicle Behavior in Microscopic Simulation	Fan Zuo, Jingqin Gao, Di Sha, Joseph Chow and Kaan Ozbay

Lectern session 3

Pedestrian safety

14:00 — 15:45

Room: D

Chair: Aliaksei Laureshyn, Lund University, Sweden

ID	Title	Authors
26	Exploring Speed-Related Behavioral and Infrastructure Interactions in Pedestrian Crash Risk Using Explainable Machine Learning for Safe System Implementation	Asnake Adraro Angelo, Kotaro Sasai and Kiyoyuki Kaito
102	Psychophysics-based gap acceptance model to understand pedestrian road crossing behaviour on slip lanes using a virtual reality study	Md Eaysir Arafat, Sherrie-Anne Kaye, Ronald Schroeter and Shimul Md Mazharul Haque
186	Validating Driving Simulator Studies for Vehicle-Pedestrian Interaction Using Augmented Reality Field Experiments	Tian Zheng, Jiachen Gong, Maya Sekeran, Tanja Niels and Klaus Bogenberger
285	Assessing multiple-threat conflicts risk at a multilane pedestrian crossing	Federico Orsini, Andrea Baldassa, Claudio Meneguzzer, Massimiliano Gastaldi and Riccardo Rossi
432	A LiDAR-Based Framework for Safety Analyses of Vechicle-Pedestrian Interactions using Surrogate Safety Measures	Jhon Romer Diezmos Manalo, Valerio Gagliardi, Andrea Vennarucci, Alessandro Calvi and Francesco Bella

Lectern session 4

Surrogate measures of safety

14:00 — 15:45

Room: E

Chair: Simon Washington, Transoft Solutions (Australia), Australia

ID	Title	Authors
120	A comparative study on injury probability computed from different bivariate extreme value approaches	Zhankun Chen, Carl Johnsson and Carmelo D'Agostino
129	Uncovering Traffic Conflict Typologies through Unsupervised Learning: A Case Study of Urban Intersections in Thessaloniki, Greece	Fotini Kehagia, Apostolos Anagnostopoulos, Pavlos Gkougkoulis and Athanasios Theofilatos
144	AI-SCAN: An Automated Tool for Analyzing Vehicle Pedestrian Conflicts at Intersections	Omkar Chorge, Brendan Russo, Edward Smaglik and Eck Doerry
382	A data-driven framework for severe traffic conflict identification using vehicle trajectories	Arunava Putatunda, Barun Das and Constantinos Antoniou

Lectern session 5

Speed limits implementation and evaluation

14:00 — 15:45

Room: H

Chair: David Noyce, University of Wisconsin-Madison, United States

ID	Title	Authors
1	Variable Speed Limit Control Under Heterogeneous Driver Compliance: Rule-Based vs Reinforcement Learning in Simulation	Chiara Colombaroni, Gaetano Fusco, Natalia Isaenko, Filippo Carrese, Roberta Di Pace, Stefano de Luca, Facundo Storani, Behnood Baiky and Saeed Mansouryar
11	A stated-preference study on the acceptance of 30km/h speed limits in Greek cities	Eva Michelaraki and George Yannis
35	The effects of speed limit reduction on rural roads in the province of Utrecht	Patrick Broeren, Ilse Schelling and Kees-Jan Arens
88	Identifying High-Speed Risk Segments on Urban Expressways Using the Analytic Hierarchy Process	Filipe Mendes Gonçalves Machado, Jéssica Wanderley Souza do Nascimento, Ana Carolina de Barros Pamplona, Anderson Marden de Sousa Silva, Gabriel Nakalski Farias, Matheus de Souza E Silva, Marina Leite de Barros Baltar, Glaydston Mattos Ribeiro and Cíntia Machado de Oliveira
125	Investigating the Effectiveness 30 km/h Speed Limit Zones: A Driving Simulator Study on Driver Compliance	Andrea Paliotto, Camilla Mazzi, Monica Meocci, Costanza Carini and Francesca La Torre

Lectern session 6

Driving simulation studies

14:00 — 15:45

Room: L

Chair: Stephane Espiè, University Gustave Eiffel, France

ID	Title	Authors
51	The impact of nighttime driving on young drivers' behavior and safety in cities using a driving simulator	Armira Kontaxi, George Yannis, Panagiotis Papantoniou and Dimosthenis Pavlou
56	Developing and Validating Driving SOPs Using Simulation: Toward Operational Standards for Safe Road Users	Pierro Hirsch
73	The Influence of Lane Closure Type on Traffic Flow in Work Zones: A Simulation Study	Sajani Siriwardene and Ashim Debnath
85	Prospective analysis: where driving simulators provide the greatest value in initial driver training and rare-risk situations	Olivier Fretay and Luisa Lopez Leza
93	Classification of Vigilance States via Pupil Dynamics: A Driving Simulator Study	Tayyaba Sahar, Nasreen Badruddin, Geert Wets, Tom Brijs, Kris Brijs, Veerle Ross and Hélène Dirix
467	Crowdsourcing as a Tool to Evaluate Perceived Safety and Comfort Zone Boundaries in Traffic: Assessing and Comparing Experimental Designs	Sarang Jokhio, Minxiang Zhao and Jonas Bärgman

Lectern session 7

Global Forum for Road Traffic Safety at United Nations Economic Commission for Europe, part 2

Global Road Safety Governance and Innovation: Aligning science, policy, innovation for a safer society on the move

16:15 — 18:00

Room: Hall Leopoldo Massimilla

Chair: Luciana Iorio, United Nations Economic Commission for Europe, Italy

This special session will bring together leading experts from government, academia, and corporate to explore the future of road safety policy in a rapidly evolving mobility landscape, mirroring the United Nations Economic Commission for Europe (UNECE) Global Forum for Road Traffic Safety Agenda.

Featured speakers of part 2:

- **Ricardo Fonseca**, Mafra Municipality, Portugal
- **Zhandos Amanbayev**, Association of Professional Engineers, Kazakhstan
- **Arystan Massanov**, Scientific Research Institute for Road Safety, Kazakhstan
- **Sam Clark**, TransAid, United Kingdom
- **James Bradford**, iRap, United Kingdom
- **Tova Rosembloom**, Bar Ilan University, Israel
- **Luciana Iorio**, Global Forum, MIT, PIARC Italy

Lectern session 8

Speed management

16:15 — 18:00

Room: Hall Scipione Bobbio

Chair: Patrick Broeren, Arcadis, The Netherlands

ID	Title	Authors
74	The Effectiveness of Warning Signs in Improving Speed Limit Compliance at Work Zones	Ashim Debnath, Sajani Siriwardene, Ross Blackman, Sadia Afroza and Amrit Ghimire
184	Effects of precipitation and water layer thickness on speed adaptation on different freeway pavement types	Johan Vos and Kuman Anupam
231	Learning or Luck? Behavioral Adaptation to Camera Enforcement in New York City	Fan Zuo, Zerun Liu, Jingqin Gao and Kaan Ozbay
340	Effects of Perceptual Markings on Driver Behavior in Horizontal Curves on Rural Roads: A Driving Simulator Study	Mahdi Sadeqi Bajestani, Tom Brijs and Ali Pirdavani
359	Victoria's Safer Roads Evaluation Program: Mornington Peninsula Short-Term Speed Management Evaluation	Shane Turner, Amir Sobhani and Graham Wood

Lectern session 9

Cognitive and psychophysiological factors in driving safety, part 1

16:15 — 18:00

Room: D

Chair: Alessandro Calvi, University of Rome 3, Italy

ID	Title	Authors
27	Visual attention effects of head-up display warnings in a simulated emergency driving scenario	Maximilian David and Alvaro Garcia-Hernandez
31	User-Centered mental fatigue detection in simulated driving: comparison between an EEG-driven and ToT-driven approach in labelling driver's state	Francesca Dello Iacono, Marianna Cecchetti, Vincenzo Ronca, Rossella Capotorto, Pietro Aricò, Gianluca Borghini, Fabio Babiloni, Gianluca Di Flumeri and Andrea Giorgi
36	Cognitive Distraction and Highway Overtaking Safety: Evidence from a Driving Simulator Experiment	Fabiola Daneluz and Nicola Baldo
40	Contextual patterns of distraction and sleepiness in ride-hailing drivers: a class association rule mining analysis of driver-monitoring warnings	Tiago Fonseca and Sara Ferreira
394	Enhancing Road Safety among Sleep-Deprived Young Drivers with Smart Road Markings: A Multimodal Approach Integrating Driving Performance, Physiological Metrics, and Subjective Experience	Francesco Angioi, Leandro Di Stasi, Rocío de Oña, David Soler Ortiz, Juan de Oña and Carolina Diaz-Piedra

Lectern session 10

Cycling safety

16:15 — 18:00

Room: E

Chair: Rafael Grzebieta, University of New South Wales, Australia

ID	Title	Authors
165	A setup for collecting and investigating riding dynamics of cyclists of different age to identify challenging situations	Stefan Portisch, Andreas Hula, Emanuel Manhart, Christian Fürstler, Karin Markvica, Sonia Zajac, Michael Aleksa and Bettina Schützhofer
180	Influence of the geometric design of horizontal curves in bike lanes on the speed and trajectory of micromobility users	Alejandra Sofia Fonseca Cabrera, Mustafa Salah Abdulhussein Al-Hakeem, David Llopis-Castelló and Alfredo García
286	Simulation Framework and Risk Assessment of ADAS and C-ITS Advanced Braking Support Systems for Cyclists' Safety	Giuseppina Pappalardo, Giovanni Andrea Dimauro, Salvatore Cafiso and Alessandro Di Graziano
307	Infrastructure-Enhanced AEB for Detecting Multiple Types of Occluded Vulnerable Road Users in Urban Scenarios	Martina Tornesi, Daniele Vignarca, Edoardo Sabbioni, Stefano Melzi and Federico Cheli
469	A Unity Pipeline for Procedural Generation of Real-World and Synthetic Environments for Cycling Research	Chinmay Srinivas, Heike Vallery and Nuria Pena-Perez

Lectern session 11

Road safety policies and strategies

16:15 — 18:00

Room: H

Chair: Deogratias Eustace, University of Dayton, United States

ID	Title	Authors
451	A Scientific and Systematic Framework to Implement Vision Zero Plans in Rural and Small Towns	Dewan Karim, Abdul Alozi Razak and Robert Anthony Mansell
71	Navigating Policy Reform: Storytelling, Systems Thinking, and the Politics of Road Safety	Claire Campbell
81	Beyond General Norms: The Role of Close Social Ties in Red-Light Running	Mathias De Roeck
321	HiSensitive Lane: Enhancing Driver Safety with Intelligent Roadway Lighting	Valeria Marlazzi and Giovanni Bonini

Lectern session 12

Tunnels and drainage systems

16:15 — 18:00

Room: L

Chair: Giulio Dondi, University of Bologna, Italy

ID	Title	Authors
53	Modelling of water-based fixed fire-fighting systems in road tunnels in the event of a fire	Ciro Caliendo, Gianluca Genovese and Isidoro Russo
189	Towards Zero Fatalities: Applying Safe System Principles to Motorway Infrastructure Design	Damiano de Gennaro, Carlo Vaghi, Marianna Tomasin and Mario Brugnoli
248	Cost/Benefit and Sustainability of Particulate Matter andChemical Load Recovery Practices for Urban Roadway Systems as Compared to Infrastructure Controls	John Sansalone and Muhammad Hamza Naveed
249	Design Optimization of Drainage Treatment in Spatially Constrained Highway Geometrics with a Coupled CFD and ML Tool: DeepXtorm Case Study	John Sansalone and Haochen Li
483	Study on the Minimum Clearance from Highway Interchange Exit to Tunnel Entrance	Binghong Pan, Yihao Zhang, Zihan Xu, Yizun Huang and Yiwen Ma

Wednesday, June 24 – Poster Sessions

Poster session 1

Data analysis and safety assessment

14:00 — 15:45

Room: Atrium

Chair: Orazio Pellegrino, University of Messina, Italy

ID	Title	Authors
3	Identifying the probable causes of road traffic accidents in Ogun State	Oluwaseun Wale-Orojo, Fatai Adenekan and Ajibola Soyinka
4	Numerical Modeling of Large Soil Deformation for Road Safety Barriers: A Comparative Study	Leonardo Querci
69	Integrated Analysis of Telecoupled Risks to Road Safety: The Impact of Wildfire Smoke on Traffic Crashes	Anelise Schmitz, Tatiana Gadda, Belzénia Matsimbe and Sara Ferreira
105	An Assessment of NCAP Overall Safety Ratings and Real-World Driver Injury Severity using CISS Data	Nischal Gupta and Megat-Usamah Megat-Johari
113	Proactive quantification of spatiotemporal collision probabilities on freeway curves using physics-informed Bayesian trajectory prediction	Zhenlin Hu, Feng Zhu, Yixuan Zhang, Wenjie Wu and Xianghai Meng
132	Comparison of Factors Affecting the Severity of Vulnerable Road User Crashes Using the XGBoost Machine Learning Model in Eslamshahr City, Iran	Ali Tavakoli Kashani, Mahdi Hadinia, Mahdi Heydari, Mohammadreza Bagheri Delouee, Gerd Müller and Steffen Müller
133	Propensity Score Matching and Ordered Probit for E-Scooter Safety Perception on Tehran's Protected Lanes; Evidence from a Video-Based Survey	Ali Tavakoli Kashani, Mohammadreza Bagheri Delouee, Mahdi Heydari, Amirhossein Taheri, Gerd Müller and Steffen Müller
183	Road Infrastructure Management: methodological reflection on applications in The Netherlands and improvements for the future	Daan Verzijl, Patrick Broeren and Emiel Soffers
279	Design, assessment and actual road traffic safety, provided by roadway geometry and pavement, collected and processed at high speed	Stefano Drusin
323	Investigate the Impact of COVID-19 on Transportation Safety Equity: A Difference-in-Difference Method	Xiaomeng Dong, Kun Xie and Hong Yang
333	Research on Road Icing Prediction Using Early Warning Systems in the Henan Region of China	Jian Guan, Keke Wei, Chenguang Wan, Xiaofeng Wang, Tiezheng Guan, Lei Zhang and Zhigang Zhao
362	Clustering Methods for Crash Data Mining: A Comparative Analysis of Hierarchical, K-Modes, and Self-Organizing Map Approaches	Ali Tavakoli Kashani, Matin Shahri, Majid Najafi, Mahdi Hadinia and Gred Müller
376	Machine Learning–Based Analysis of Driving Behavior and Road Safety Using Connected Vehicle Data	Andreas Englezos, Armira Kontaxi, George Yannis and Eleonora Papadimitriou
379	Real-Time Context-Aware Deep Learning for Curve Speed Prediction in Intelligent Transportation Systems	Andrea Di Luca, Andrea Gobbi, Davide Molinari, Milad Alijantabar Shani, Pietro Lechthaler, Shaker Mahmud Khandaker, Fitsum Meshesha Kifetew, Davide Prandi, Angelo Susi, Roberto Tiella, Gaetano Fusco, Chiara Colombaroni and Marco Cristoforetti
384	Balancing Imbalanced Crash Data with SONCA: A Resampling Method for Numerical and Categorical Predictors	Filomena Mauriello , Massimo Aria , Roberta Siciliano , Francesco Galante , Rosa Milluccio and Alfonso Montella
410	A Combined CATPCA and Ordered Probit Approach to Freeway Median-Related Cash Severity Analysis	Deogratias Eustace, Avani Patel, Theus Aspiras and Philip Appiah-Kubi
428	Improving Crash Data Accuracy by Identifying Seatbelt Inference Mismatch Using NLP and Behavioral Modeling	Sudesh Bhagat, Mohammed Shaiqur Rahman, Skylar Knickerbocker, Neal Hawkins, Anuj Sharma and Edward Smaglik
434	Risk Index to rank road restraint systems upgrading	Maria Rella Riccardi, Paolo Anfosso, Gavriel Caivano, Luca Biagini and Alfonso Montella

496	A Hybrid Approach for Modelling Crash Spatial Heterogeneity by Geographically Weighted Negative Binomial and Generalized Additive Models	Filomena Mauriello, Maria Grazia Augeri, Francesco Galante, Vittorio Nicolosi and Alfonso Montella
497	Psycho-attitudinal predictors of risky driving styles: a driving simulator analysis of speed and lateral position	Francesco Galante, Filomena Mauriello, Giuseppe Castaldo, Simone Fucito, Mariano Pernetti and Alfonso Montella

Poster session 2

Safety performance of roundabouts

16:15 — 18:00

Room: Atrium

Chair: Grigorios Fountas, University of Thessaloniki, Greece

ID	Title	Authors
14	Heavy Truck Drivers' Behavioral and Physiological Responses to Changes in the Geometric Configuration of Roundabouts	Logan Scott-Deeter, Hisham Jashami, David Hurwitz and Salvador Hernandez
49	Road safety appraisal under cooperative driving scenarios on at-grade intersections	Maria Luisa Tumminello, Elżbieta Macioszek and Anna Granà
60	Urban Roundabouts Safety Analysis: The Case Study of Potenza city (Italy)	Donato Ciampa, Maurizio Diomedi and Saverio Olita
62	Comparative Evaluation of Roundabouts and Standard Intersections: Statistical and Experimental Evidence from Italy	Maria Augeri, Natalia Distefano and Salvatore Leonardi
75	Decoding Roundabout Safety: Quantitative Correlations Between Geometry and Driving Behavior	Salvatore Leonardi and Natalia Distefano
141	Which geometrical parameters should a safe turbo roundabout have?	Mariusz Kiec and Jiri Ambros
222	Multimodal, Explainable Conflict Prediction for Roundabouts Using BiLSTM and Vision Language Models	Abhijnan Maji, Anindya Biswas, Amanpreet Kaur and Indrajit Ghosh
225	A Perception-Based Framework for Roundabout Safety Assessment under Mixed Traffic Scenarios using Association Rule Mining	Abhijnan Maji, Sucheta Maurya and Indrajit Ghosh
228	Trajectory Forecasting using Hybrid Learning Design for Traffic Conflict Detection in Mixed-Traffic Roundabouts	Abhijnan Maji, Garvi Kaur and Indrajit Ghosh
343	Connected Automated Vehicles Increasing Operations: BIM-Supported Roundabout Design and Urban Large-scale Performance Assessment	Federica Sortino, Claudia Lo Vecchio and Tullio Giuffrè
360	Quantifying Driving Aggressiveness at Roundabouts: A New Index for Infrastructure Safety Evaluation	Nicoletta Rassu, Riccardo Zedda, Kevin Panetto, Vincenzo Pirina, Mauro Coni and Francesca Maltinti
427	Campus Roundabout Safety Assessment and Mitigation: A Case Study at King Saud University	Mohammed Almannaa, Abdulaziz Althonayan, Tareq Alotaibi, Abdullah Alsharef and Saif Alarifi

Thursday, June 25 – Keynote Speech

From raw driving data to actionable insight: computer vision and generative AI for next-generation road safety analytics

09:00 — 10:15
Room: Hall Leopoldo Massimilla
Keynote Speaker: Prof. Dr. Tom Brijs, Full Professor in Traffic Safety and Simulation, Chairman of the Internal School Council for Mobility Sciences, Transportation Research Institute, Hasselt University, Belgium

Advances in artificial intelligence are rapidly transforming how we observe, interpret, and improve driver behaviour. This keynote explores a novel end-to-end paradigm that combines computer vision and generative AI to turn raw driving data into actionable safety intelligence.
We first present a lightweight and explainable vision-based approach for detecting lane-change behaviours from dashcam video in continuous, real-world driving scenarios. Unlike traditional deep learning approaches, the method operates without manual annotations or pre-segmented events, enabling scalable deployment.
We then move beyond detection to interpretation, showing how large language models can act as intelligent agents that analyse multimodal driving data and generate human-readable reports for fleet managers. These reports not only summarize driver performance but also recommend concrete safety interventions.
This integration of perception and reasoning marks a shift from AI as a diagnostic tool to AI as a decision-support system, opening new opportunities for proactive and personalized road safety management.

Thursday, June 25 – Lectern Sessions

Lectern session 13

Safe speeds

10:45 — 12:30

Room: Hall Leopoldo Massimilla

Chair: Bhagwant Persaud, Toronto Metropolitan University, Canada

ID	Title	Authors
37	Strategies for Implementing the Safe System Approach for Speed Management	Grant Schultz, Kezia Tripp and Abbie Goss
99	Balancing Safe Speeds and Control Regularity around Speed Cushions: A Multivariate Information-Theoretic Framework	Domenico Passeri, Orazio Pellegrino, Alessia Ruggeri, Giuseppe Sollazzo and Gaetano Bosurgi
119	Assessing the Effectiveness of a Road Reconfiguration in Florence: Road Safety Improvements, Speed Reduction, and Crash Prevention	Monica Meocci, Costanza Carini, Camilla Mazzi, Andrea Paliotto and Francesca La Torre
168	What actions for speed reduction? Exploring the effects of nudges and binding communication on speed in a driving simulator	Laurine Pelter, Mathis Beltrami, Stéphane Caro, Chloé Eyssartier, Hocine Imine, Noé Marie, Elodie Mergel, Sofia Palese, Alexandre Sanchez, Christophe Tettarassar, Valeria Vignali and Adrien Vizier
414	Wramborg Fatality Risk vs Impact Speed Curves Re-visited	Raphael Grzebieta, Kardina Ayuningtyas, Carlo Caponecchia and Jake Olivier

Lectern session 14

Road safety in urban areas

10:45 — 12:30

Room: Hall Scipione Bobbio

Chair: David Hurwitz, Oregon State University, United States

ID	Title	Authors
215	Video-Based Study of Pedestrian Compliance at Signalized and Non-Signalised Crossings in Athens	Stella Roussou, Apostolos Ziakopoulos, Roberto Ventura, Eleonora Papadimitriou and George Yannis
255	Analysis of urban road accidents involving vulnerable road users and freight vehicles: evidence from Rome	Antonio Comi and Ippolita Idone
271	Active Mobility and Historical Urban Landscape: Tactical Interventions for Safer and Inclusive Cities	Francesco Pinna, Chiara Garau, Andrea Manca and Maria Serena Pirisino
339	Behavioral Effects of Low-Cost Safety Interventions at Urban Intersections: A Driving Simulator Study	Mahdi Sadeqi Bajestani, Tom Brijs and Ali Pirdavani
430	Driver–Pedestrian Interaction at Urban Crosswalks: a Driving Simulator-Based Evaluation of Safety Countermeasures for Risk Mitigation	Andrea Vennarucci, Valerio Gagliardi, Alessandro Calvi, Fabrizio D'Amico and Francesco Bella

Lectern session 15

Road safety management

10:45 — 12:30

Room: D

Chair: Brendan Russo, Northern Arizona University, United States

ID	Title	Authors
20	Empowering Change: The Impact of the "Be Wise, Drive Safe" Project on Youth Road Safety	Alfonso Piscitelli, Roberto Fasanelli, Alessandra Franciosa, Simone Fucito, Francesco Galante, Filomena Mauriello, Maria Rella Riccardi, Antonella Scarano, Sonia Coppola and Alfonso Montella
54	Enhancement of the Highway Safety Manual Procedure for Estimating the Safety Effects of Roadside Design for Two-Lane Rural Roads	Bhagwant Persaud, Raghavan Srinivasan, Robert Mansell, Jeff Gooch and Mahsa Jafari
208	Assessing Socio-Spatial Disparities in Road Safety: The Role of Area Deprivation in Crash Frequency and Severity in Scotland	Athanasios Demiris, Grigorios Fountas, Fotios Magkafas, Achille Fonzone and Socrates Basbas
316	The Relations between Symptom of Post Traumatic Stress Disorder, Cognitive Schemes, Sensation Seeking and Safe Driving	Dana Shuchman and Tova Rosenbloom
460	Alcohol-Involved Road Safety Trends and Strategies: Insights from U.S. Road Safety Monitoring (2015–2024)	Milad Delavary, Craig Lyon, Hannah Barrett, Steve Brown, Carl Wicklund, Robyn Robertson and Ward Vanlaar
602	Dynamic Traffic Flow System	Alessandro Priola, Special projects and traffic management analyst at Movyon; Donato Preite, CTO Cirsma Security

Lectern session 16

Network-wide road safety assessment

10:45 — 12:30

Room: E

Chair: James Bradford, International Road Assessment Programme, UK

ID	Title	Authors
23	Estimating Reference Population for Network wide Road Safety Assessments	Tevoh Lordswill Ndingwan, Brayan González-Hernández, Isaac Ndumbe Jackaii II, Davide Shingo Usami and Luca Persia
61	A network-wide crash risk assessment model using autonomous vehicle probe data	Sunny Singh, Yasir Ali, Shamsunnahar Yasmin and Shimul Md Mazharul Haque
238	Network-Wide Road Safety Assessment (NWRSA) in regional rural roads: Case Study in Andalusia, Spain	José Navarro-Moreno, Linda Tlili and Francisco Reina
304	Development and validation of the Italian procedure for Network-Wide Road Safety Assessment	Stefano Zampino, Luca Conticini, Eugenio Martino, Maria Rella Riccardi and Alfonso Montella
399	New systemic road safety approach based on connected vehicle data	Pedro Tomás Martínez, Juan Cánovas Masero, José Carlos Valdecantos Álvarez and Màrius Navazo Lafuente

Lectern session 17

Work-zone safety

10:45 — 12:30

Room: H

Chair: Attila Borsos, University of Győr, Hungary

ID	Title	Authors
112	Temporary Work Zones: Passive Safety Strategies to Protect Road Workers	Mauro Corsanici and Gianfranco Capriello
198	Freeway crash patterns in work zones: an in-depth analysis	Paolo Intini, Giuseppe Loprencipe and Vittorio Ranieri
269	Understanding Driver Merge Behavior in the Presence of Mobile Work Zone Intrusion Systems	Abigail Monney, Shauna Hallmark and Jonathan Wood
405	Drone-Based Trajectory Extraction and Surrogate Safety Assessment in Highway Work Zones: A Multi-Site Analysis Toward Proactive Risk Mitigation	Pedro Huertas-Leyva, Giulia Tabanella, Francesco Galante, Andrew Bagdanov, Benedetto Carambia, Stefano Palladino,Simone Fucito and Alfonso Montella
419	Automated-Vehicle Performance in Navigating Work Zones: Insights from Crowdsourced Data Narratives	Fady Reyad and Mohamed Ahmed

Lectern session 18

Safety Perceptions of CAVs

10:45 — 12:30

Room: L

Chair: Dario Babić, University of Zagreb, Croatia

ID	Title	Authors
30	Investigating User Acceptance and Safety Perceptions of Cooperative, Connected, and Automated Mobility (CCAM) Systems in Greece	Paraskevi Koliou, Konstantina Roumeliwti, Eleni Maria, Theodoraki and George Yannis
68	On the Validation of Formation Control for Connected Autonomous Vehicles: A Vehicle-in-the-Loop approach for the driving safety assessment	Aniello Mungiello, Gianmarco Pane, Alberto Petrillo and Stefania Santini
123	Retrofitting Urban Intersections for Safer Cyclist Interaction under Cooperative Perception: An Occlusion-Aware Case Study	Benedikt Stern, Mario Ilic, Tanja Niels and Klaus Bogenberger
245	The Impact of Mismatch between Automated Vehicle Driving Style and Users' Own Driving Style on their Experience	Jinyang Zhao, Amir Pooyan Afghari, Serge Hoogendoorn and Haneen Farah
482	Social Acceptance of Connected and Autonomous Vehicles: Predictors of Behavioral Intentions in a National Italian Sample	Roberto Fasanelli, Alfonso Piscitelli, Giovanni Toscano, Sofia Foglia, Assunta Luongo, Federica Cossu, Francesco, Ciro Scotto and Alfonso Montella

Lectern session 19

Urban and sustainable mobility

14:40 — 15:45

Room: Hall Leopoldo Massimilla

Chair: Gaetano Fusco, "La Sapienza" University of Rome

ID	Title	Authors
115	Experimental Study of Pedestrian Discomfort in E-Scooter Encounters Under Varied Lighting and Approach Conditions	Soichiro Takakuwa, Tatsuto Suzuki, Kazufumi Suzuki, Nick Tyler and Koji Suzuki
164	Assessing Pedestrian Crash Severity with Econometric and Machine Learning Models: an initial step toward evaluating the impacts of 30 km/h Zone	Giuseppe Cappelli, Antonella Scarano, Sofia Nardoianni, Maria Rella Riccardi, Mauro D'Apuzzo and Alfonso Montella
171	Toward a VR-Based Methodology for Assessing Comfort, Safety, and Perceived Well-Being in Regenerated Urban Spaces: The Parco del Mare in Rimini as a Case-Based Simulation	Isabella Giovanetti, Margherita Pazzini, Cecilia Mazzoli, Annarita Ferrante, Giulio Dondi, Valeria Vignali and Claudio Lantieri
173	Understanding and Quantifying the Effects of Behavioural and Contextual Factors on Pedestrian Decision-Making: A Meta-Analytic Perspective	Shubham Shrivastava, Anshuman Sharma and Abhisek Mudgal
212	Exploring the role of safety perception on the use and acceptance of mobility hubs	Vasiliki Amprasi, Panagiotis Papantoniou, Dimosthenis Pavlou and Eleni Karakitsou

Lectern session 20

Forgiving roadsides

14:40 — 15:45

Room: Hall Scipione Bobbio

Chair: Marco Anghileri, Polytechnic University of Milan, Italy

ID	Title	Authors
2	Reimagining Urban Road Safety: Innovative Solutions for Vulnerable Environments	Roberto Impero and Stefano Maria Caterino
13	Investigation on the hazard potential of a rounded railing start for bridges and small structures	Moritz Grimmelsmann
76	Data-Driven Calibration of Vehicle Pulse Index Parameters: Optimizing Restraint Stiffness for Improved Crash Severity Assessment in Frontal Crashes	Yimeng Mei, Yusuke Miyazaki, Robert Thomson, Jordanka Kovaceva and Fusako Sato
455	Influence of High Energy absorbing passive safe poles in run off road crash severity	Carlos Roque, João Lourenço Cardoso, Heike Martensen, Quentin Lequeux

Lectern session 21

Advanced Driver Assistance Systems

14:40 — 15:45

Room: D

Chair: Stefania Santini, University of Naples Federico II, Italy

ID	Title	Authors
96	Do Advanced Driver Assistance Systems Reduce Bodily Injury Claim Severity? Evidence from Compulsory Third-Party Insurance	Heshani Rupasinghe, Jihadur Rahman, Md Mazharul Haque and Shamsunnahar Yasmin
100	Familiarization with the Advanced Driver Assistance Systems (ADAS) on vehicles: A case study	Stefano Coropulis, Andrea Bosco, Alessandro Caffò, Paolo Intini, Nicola Introcaso, Sergio Traficante, Luigi Tinella and Vittorio Ranieri
148	Investigating Control Transitions in Semi-automated Vehicles through Machine Learning Techniques	Saumik Sakib Bin Masud and Alexandra Kondyli
261	Cognitive prerequisites of Fitness-to-Drive as Predictors of Real-World Driving Under Varying ADAS Conditions	Luigi Tinella, Sergio Traficante, Alessandro Caffò, Andrea Bosco, Paolo Intini, Nicola Introcaso, Nicola Berloco, Stefano Coropulis and Vittorio Ranieri
493	A data-driven method to distinguish manual and ACC-enabled driving through spectral analysis of speed signals	Nikolaos Panagiotis Trantas and Constantinos Antoniou

Lectern session 22

Pavement design and evaluation

14:40 — 15:45

Room: E

Chair: Massimo Losa, University of Pisa, Italy

ID	Title	Authors
121	Assessment of Road Surface Types based on a Vehicle-Mounted Microphone	Riccardo Ceriani, Eyal Levenberg, Jonas Brunskog, Fredrik Johansson, Matteo Pettinari, Margherita Pazzini, Valeria Vignali and Claudio Lantieri
126	Evaluating the Effect of Surface Friction on Vehicle Crash Severity Through Finite Element Crash Simulation	Ahmed Mohamed and Mohamed Ahmed
137	Correlation of asphalt mixture mechanical performance to surface texture and friction parameters	Cristina Oreto, Carlotta De Giuli, Flavio Farroni, Andrea Genovese, Giuseppe D'Addio, Nunzio Viscione and Francesca Russo
278	Fragility analysis of Permanent Deformation of asphalt mixture considering performance uncertainty	Tiezheng Guan, Jian Guan, Yuanxun Zheng, Lei Zhang and Chao Zhang
349	Detection of local surface irregularities for safe sidewalk users based on three-dimensional point cloud	Shohei Sakan, Kazuya Tomiyama, Takuma Sanada, Subaru Yoshida and Kazushi Moriishi

Lectern session 23

Cognitive and psychophysiological factors in driving safety, part 2

14:40 — 15:45

Room: H

Chair: Roberto Fasanelli, University of Naples Federico II, Italy

ID	Title	Authors
101	Assessing Driver Behaviour and Physiological Responses After Exposure to Different Levels of Automation	Alessia Ruggeri, Orazio Pellegrino, Giuseppe Sollazzo and Gaetano Bosurgi
218	A Methodological Framework for Assessing Vigilance Effects on Driver Performance	Margherita Pazzini, Riccardo Ceriani, Andrea Castellano, Francesco Moretti, Andrea Simone, Valeria Vignali and Claudio Lantieri
317	Using Risk Homeostasis Theory for Examining Self-Regulated Driving of the Israeli Driver	Tamar Wasserman and Tova Rosenbloom
318	The Motivation for Safe Drive in Response to Reward and Punishment Among Drivers with Company Vehicle	Keren Maman and Tova Rosenbloom
341	Eco-Driving Training as a Safe System Intervention: Cognitive and Ergonomic Evidence from Real-World Urban Driving	Mahdi Saadatfar, Seyed Abolfazl Zakerian and Hanieh Abdi
466	Adults at high risk of driving under the influence of cannabis: findings from a multistate questionnaire across legalization contexts	Morgan Keefe, Sara Baird, Sarah Hacker, Renee Dell'Acqua, Daniel Ageze, Alice Gold, Tom Shaughnessy, Ilene Lanin-Kettering, Thomas D. Marcotte and Linda L. Hill

Lectern session 24

Safety of powered two-wheelers

14:40 — 15:45

Room: L

Chair: Fotini Kehagia, Aristotle University of Thessaloniki, Greece

ID	Title	Authors
38	Modeling lateral displacement decisions of powered two-wheelers at signalized intersections using the drift diffusion model	Hsuan-Yi Lin and Yishih Chung
86	Investigation of the Effects of Electric Scooters on Road Traffic Safety: The Case of Istanbul's Bağdat Avenue	Selim Dündar and Zehra Gündüz
92	Analyzing the influence of two-stage left-turn signs on riding behavior of motorcyclists	Chi-Hung Wu, Liang-Chieh Kuan and Cheng-Hung Huang
175	Investigating Transferability of Risk Estimates of Motorcyclists Dynamics between different Riders	Andreas Hula, Stefan Portisch, Christian Fürstler, Gerald Bauer and Peter Saleh
182	Seeing Through the Rider's Eyes: E-Scooter Risk Perception in Virtual Reality	Danielle Teh, Abrar Hazoor, Giuseppe Marinelli and Özlem Simsekoglu

Lectern session 25

Pedestrian safety

16:15 — 18:00

Room: Hall Leopoldo Massimilla

Chair: Mauro D'Apuzzo, University of Cassino, Italy

ID	Title	Authors
72	Investigating Blood Alcohol Concentration On Two-Vehicle And Vehicle–Pedestrian Crash Severity With A Random Correlated Bivariate Generalized Ordered Probit	Chia-Hsien Pao, Ku-Lin Wen and Chiang Fu
109	Modelling pedestrian crash frequency: A spatial model using a walkability metric	Bekir Bartin, Mohyeddin Nikbakht and Kaan Ozbay
118	A Comparison of Statistical Models to Assess Pedestrian Crash Risk: Evidence from Brescia (Italy)	Stefano Raccagni, Anita Menozzi, Roberto Ventura and Benedetto Barabino
256	Preliminary Findings on Pedestrian Crash Frequency Prediction Models: A Case Study in Rome	Mauro D'Apuzzo, Giuseppe Cappelli, Sofia Nardoianni, Wiem Neji, Sirine Benassi, Giovanni Camillo Porzio and Simona Balzano
481	Evaluating Statistical and Machine Learning Approaches for Modeling Pedestrian Crashes Near Transit Bus Stops	Tolu Oke, Jimi Oke, Francis Tainter and Michael Knodler

Lectern session 26

Using EEG and Eye-Tracking Data

16:15 — 18:00

Room: Hall Scipione Bobbio

Chair: Gianluca di Flumeri, “Sapienza” University of Rome, Italy

ID	Title	Authors
122	Influence of Highway Work Zone Signs on Drivers’ Visual Behavior and Perception	Sofia Palese, Sham Mirou, Margherita Pazzini, Davide Chiola, Andrea Simone, Claudio Lantieri and Valeria Vignali
197	Cognitive Workload Monitoring in Tramway Service: an integrated Eye-Tracking and EEG approach on Florence’s T2 line	Leonardo Cameli, Riccardo Ceriani, Margherita Pazzini, Manuela Contaldo, Valeria Vignali and Claudio Lantieri
203	Driver Perception of Road Signage: Comparison of Two Eye-Tracking Systems	Namatirai Cheure, Busisiwe Marole, Tshegofatso Mongae, Keolebogile Bosilong, Johannes Matsaung and Karien Venter
282	How Explicit Frontal Braking Signals Reshape Deceleration Perception: Evidence from Response Times and Eye Movements	Daniel Eisele, Sven-Thomas Graupner, Jens R. Helmert, Sebastian Pannasch and Tibor Petzoldt
488	Assessing the Effectiveness of Road Signage for Speed Reduction Using Driving Simulator and Eye-Tracking Data	Alberto V. Victorino Júnior, Ruy Santos Ribeiro and Ana Paula Camargo Larocca

Lectern session 27

Safety at intersections and pedestrian crossings

16:15 — 18:00

Room: D

Chair: Grigorios Fountas, Aristotle University of Thessaloniki, Greece

ID	Title	Authors
59	Comprehensive Analysis of Factors Influencing Pedestrian Injury Severity at Intersection and Non-intersection Locations in Connecticut	Anshu Bamney, Manmohan Joshi, Niloufar Shirani and Eric Jackson
145	Mixture Extreme Value Modelling Framework for Pedestrian Crash Frequency Estimation Using Risk Force Theory	Saransh Sahu, Yasir Ali, Sebastien Glaser and Shimul Md Mazharul Haque
324	How Do Autonomous Vehicles Influence Pedestrian Avoidance Behaviors in Safety-Critical Interactions: A SMamba-DDPG Reinforcement Learning Framework	Qingwen Pu, Kun Xie, Hong Yang, Junqing Wang and Guocong Zhai
351	Risk Dynamics of Pedestrian Crossing at Unsignalized Intersections: Insights from Surrogate Safety Assessment using Anticipated Buffer Time	Ninad Jadhav, Manish Dutta and Shriniwas Arkatkar
433	Pedestrian Crossing Behaviour in Virtual Environments: an Immersive Simulation-Based Analysis of Gap Acceptance and Safety at Urban Crosswalks	Valerio Gagliardi, Andrea Vennarucci, Jhon Romer Diezmos Manalo, Alessandro Calvi, Fabrizio D'Amico and Francesco Bella

Lectern session 28

Road safety countermeasures and evaluation

16:15 — 18:00

Room: E

Chair: Riccardo Rossi, University of Padua, Italy

ID	Title	Authors
226	Safety at Rural Intersections with Added Traffic Conflict Warning	Vamsi Krishna Bandaru, Andrew Tarko, Qiming Guo, Mario Romero and Lucas Florez
229	Safety Performance of Centerline Raised Pavement Markers	Andrew Tarko, Lucas Florez, Vamsi Bandaru and Mario Romero
311	Integrated Assessment of Passing Maneuvers Based on Road and Vehicle Characteristics	Stergios Mavromatis, Vassilis Matragos, Antonis Kontizas and Antonis Trakakis
397	Factors related to crashes on wet pavements of rural roads: a taxonomy for different severities and road classes under a safe system approach perspective	Paolo Intini, Giuseppe Loprencipe and Vittorio Ranieri
486	Enhancing Rural Crash Notification Reliability Using Non-Terrestrial Networks: A Comparative Analysis of NB-IoT NTN and NR-NTN	Andreas Alamanos

Lectern session 29

The era of CAVs and smart motorways

16:15 — 18:00

Room: H

Chair: Gennaro Nicola Bifulco, University of Naples Federico II, Italy

ID	Title	Authors
57	Rethinking Roadway Geometry in the Era of Autonomous Vehicles: A Literature Review	Fotini Kehagia
147	Integrating Human Factors and Traffic Conflict Techniques for Crash Risk Estimation in Connected Driving Environments	Shubham Parashar, Zuduo Zheng, Andry Rakotonirainy and Shimul Md Mazharul Haque
234	A SOTIF-based simulation framework for evaluating the combined impact of V2X and weather conditions	Mario Noioso, Manuela Tufo, Fabio Ursumando, Turan Nasibli, Ciro Raggioli, Alberto Petrillo and Stefania Santini
475	Learning to Suppress Traffic Risk Cascades: V2X-Enhanced Propagation-Aware Multi-Agent Control	Jiayu Yang, Yilan Zhao, Jaeyoung Lee and Constantinos Antoniou
601	Smart Motorways: Enhancing Wrong-Way Vehicle Detection with Integrated Radar and Video Analytics	Marco Colloredo - Direttore Operations, Esercizio, Innovazione e Strategia - Milano Serravalle Marco Molteni - Servizio Gestione Viabilità – Milano Serravalle Donato Preite – CTO Crisma Security

Lectern session 30

Virtual reality–simulated environments

16:15 — 18:00

Room: L

Chair: Damiano Cafiso, University of Catania, Italy

ID	Title	Authors
111	Physically Based Models for E-Scooter and Pedestrian Collisions: Validation through Multi-body Simulations	Sofia Nardoianni, Giuseppe Cappelli, Mauro D'Apuzzo and Vittorio Nicolosi
413	A Fundamental Study on Peripheral Vision Omission during Driving with Virtual Reality Equipment	Mio Suzuki
424	A Validation Study of an Advanced Driving Simulator Based on Head-Mounted Display	Alessandro Calvi and Andrea Vennarucci
437	Behavioral Effects of a Bicycle-Mounted Collision Warning Device at a Simulated Intersection with limited sight distance	Ágoston P. Sándor, Fatima Kchour, Amira Hammami, Attila Borsos, Salvatore Cafiso and Giuseppina Pappalardo
454	Virtual reality–simulated interaction between micro-mobility vehicles and pedestrians: A biomechanical analysis of human gait and movement responses	Ajith Sominanda Herath Mudiyanselage, Sahan Jayanath Siriwardana, Aiman Alhetari, Omar Aboelrous, Mohamed Elansari, Jassim Al Jufairi, Mohammed Al-Kuwari, Qinaat Hussain, Charitha Dias and Anas Amr Mohamed Farag Madkoor

Thursday, June 25 – Poster Sessions

Poster session 3

Safety issues in Low and Middle-Income Countries

10:45 — 12:30
Room: Atrium
Chair: Nicholas Fiorentini, University of Pisa, Italy

ID	Title	Authors
149	A Random-Parameter Bivariate Extreme Value Model in Estimating Rear-End Crash Risk by Injury Severity Using Safety Field Theory in a Developing Country Context	Jinbao Zhang, Hassan Bin Tahir and Shimul Md Mazharul Haque
191	Advancing Gender Equality and Social Inclusion through Climate-Resilient Road Infrastructure in Papua New Guinea	Vincenzo Cardinale and María Victoria Moragues
232	Multi-LLM framework for Automated Extraction and Analysis of Road Accident Narratives from Unstructured Text	Abhijnan Maji, Sachin Prasanth, Omprakash Rout and Indrajit Ghosh
235	Safety Assessment and Improvement of a Multi-Lane Roundabout Using Microsimulation Under Mixed Traffic Condition in SUMO	Abhijnan Maji, Pranshu Jaiswal and Indrajit Ghosh
237	Safety Outcomes of Traffic Control Devices and Autonomous Vehicle Penetration at Roundabouts under Heterogeneous Traffic: A Calibrated Microsimulation Study	Abhijnan Maji and Indrajit Ghosh
264	Application of Negative Binomial Regression to Model Pediatric Road Traffic Injury Severity within a Haddon Matrix Framework	Anthony Baffour Appiah, Vincent Ativor, Martin Tangnaa Morna, Chris Oppong, Peter Donkor, Charles Mock, Peter Dambach and Michael Lowery Wilson
273	Comprehensive speed management in urban areas: The speed management plan for Ulaanbaatar (Mongolia)	Francisco Reina Barranco and Sydney Jones
337	An Empirical Analysis of Fatal Crash Patterns and Geometric Risk Factors: A Case Study of Selected Highways in Gujarat, India	Laxman Singh Bisht, Ayush Basu Sengupta, Muskan Goel, Geetam Tiwari and Kumar Neeraj Jha
393	Simulation-Based Evaluation of Advanced Driver Assistance Systems (ADAS) under Mixed Urban Traffic Conditions: A Delhi-Based Case Study	Rohith G and Sai Chand
462	Road Object Detection using YOLOv8 for Emergency Vehicles and Helmet Compliance Monitoring: A Case Study of Morocco	Mohamed Lamrabet, Maryam Alami Chentoufi and Rachid Ellaia

Poster session 4

Safety of vulnerable road users

14:00 — 15:45
Room: Atrium
Chair: Ali Pirdavani, Hasselt University, Belgium

ID	Title	Authors
21	Analysis of the Accident Characteristics of Electric Mobility Devices in Taiwan	Pin-Yi Tseng, Shu-Fang Lai and Yu-Hui Huang
52	A scoping review of traffic crash studies involving elderly car drivers using police, hospital, and insurance data	Anamarija Poll, Matjaž Šraml and Chiara Gruden
90	Simulator-Based Motorcycle Safety Education for Older Riders: Effects of Cognitive Function on Learning Left-Turn Decision-Making at Signalized Intersections	Wan-Hui Chen, Cheng-Hung Huang, Yi-Shih Chung, Yun-Hsuan Hsu, Ling-Ting Huang, Han-Ju Tsai and Dao-Yi Huang
158	Comparative Study of Younger and Older Drivers' Emergency Response and Gaze Behavior in Sweden	Yuqing Zhao, Jordanka Kovaceva, Sarang Jokhio, Koki Hoshino, Koji Mizuno and Robert Thomson

167	Pedestrian Head Movements at Intersections with Flashing Yellow Arrow and Circular Green Right-Turn Indications	Hiba Nassereddine, Anja Katharina Huemer, David A. Noyce and Andi Bill
170	What Motivates Adult Beginners to Start Cycling	Stefan Bohmann, Rigas Wendel, Hiba Nassereddine and Anja Katharina Huemer
214	How mobile phone use is correlated with driving characteristics of two-wheeler delivery professionals	Panagiotis Papantoniou, Dimosthenis Pavlou, Vasiliki Amprasi and Eleni Karakitsou
257	Analysis and forecasting methodologies of road accidents involving vulnerable road users: a systematic literature review	Antonio Comi and Ippolita Idone
262	Identification of cyclists' crash patterns by cluster analysis and association rules	Antonella Scarano, Maria Rella Riccardi, Nicola Pasquino, Filomena Mauriello and Alfonso Montella
297	Drivers' Overtaking Behaviour Towards Cyclists: Driving simulator experiment	Filomena Mauriello, Tom Brijs, Alfonso Montella, Francesco Galante, Kris Brijs and Veerle Ross
336	Linking Traffic and Health Data to Examine Crash Characteristics and Injury Severity among Individuals with Dementia	Wan-Hui Chen, Jen-Hau Chen and Yen-Ching Chen
374	Evaluation of Road Surface Condition Focusing on Body Core Acceleration for Pedestrian Safety	Subaru Yoshida, Kazuya Tomiyama, Takuma Sanada, Shohei Sakan and Kazushi Moriishi
403	Development and Pilot Testing of a Gamified Bicycle-Based Reaction Simulator for Road Safety Education	Filip Filipović, Krsto Lipovac, Boris Antic, Dalibor Pešić, Bojana Todosijević, Nenad Marković and Smailović Emir
423	Assessing the impact of bike boxes on motorists' behaviour at signalized intersections: evidence from a driving simulator study	Simone Fucito, Francesco Galante, Filomena Mauriello, Carmelo D'Agostino, Carl Johnsson, Ruben Kuipers and Alfonso Montella
440	Opportunities and challenges of using instrumented bikes for road safety inspections	Antonella Scarano, Guido Napolitano Dell'Annunziata, Marco Aprea, Gianluca Pagano, Flavio Farroni, Maria Rella Riccardi, Francesco Timpone and Alfonso Montella
473	An Investigation into the Gaps & Opportunities for Improving Road Safety Outcomes for Vulnerable Road Users in Nairobi, Kenya	Carol Nyangore, Patrick Kiprono and Beatrice Olwa

Poster session 5

Towards the Safe System approach, part 1

16:45 — 18:00

Room: Atrium

Chair: Monica Meocci, University of Florence, Italy

ID	Title	Authors
12	Imbalanced learning analysis for driving behaviour prediction using naturalistic driving data	Antonis Kostopoulos, Thodoris Garefalakis, Eva Michelaraki and George Yannis
18	Quantifying Transferability in Road-Safety Digital Twins via Mechanism–Exposure Decomposition	Junhao Wei, Yusuke Miyazaki, Jordanka Kovaceva, Robert Thomson and Fusako Sato
29	Impact of C-V2X-enabled Stop/Go Advisory System on Driving Behavior in Yellow-light Dilemmas: Evidence from a Random-Parameters Bivariate Copula Model	Shi Ye, Taeho Oh, Yasir Ali, Inhi Kim and Tiantian Chen
32	Kinematic Signatures of Driver Distraction During Manual Control 3 in Level 3 Automated Vehicles	Mohammad Khashayarfard, Margarita Martínez-Díaz and Francesc Soriguera
33	Fatality Patterns in Attica: A Multi-Method Study of Trends, Clusters & COVID-19 Disruptions	Eleni Maria Theodoraki, Paraskevi Koliou and George Yannis

87	Automated Deep Learning Framework for the Detection and Spatial Positioning of Vertical Road Signs towards the Generation of Virtual Scenarios for Road Safety	Fabian Armando Andrade-Cataño, Valero Pascual-Gallego, Luis Iglesias and Maria Castro
163	Leveraging Machine Learning for Crash Risk Prediction in Urban Bus Networks: An Italian case	Benedetto Barabino, Fabio Porcu, Stefano Raccagni and Roberto Ventura
223	Connecting Real and Synthetic Crashes for Safety-Critical Scenario Generation	Cesar Andriola, Madhav Chitturi and David Noyce
266	Simulator-Based Visualization for Safe System-Oriented Public Participation in Urban Road Planning and Redesign	Yongqi Dong, Bhargav Sridhar, Felix Kern, Sven Biebricher, Robin Römer, Alvaro García-Hernandez and Aravinda Ramakrishnan Srinivasan
280	A systematic review of traffic safety culture definitions	Dimitrios Nikolaou, Alexandra Laiou, Susanne Kaiser, Anita Eichhorn, Eva Aigner-Breuss, Uta Meesmann and George Yannis
281	Validating lived experiences: a thematic analysis of overseas drivers' adaptation in the UK	Peiwen He, Paul Bremner, Colin A. Booth and Yuehan Li
331	Driving safety evaluation and countermeasures for wind-induced lateral deviation of various vehicles on highway bridge decks	Yuanxun Zheng, Ruilin Zhang, Tiezheng Guan, Lei Zhang and Zhigang Zhao
396	A Technology Acceptance Model for Photoluminescent Road Markings	David Soler-Ortiz, Francesco Angioi, Rocío de Oña, Carolina Díaz-Piedra, Leandro L. Di Stasi and Juan de Oña
404	Road Holding with Tire-Road Separation Analysis: A Nonlinear Vehicle Dynamics Perspective	Nguyen Dang Quy, Abolghassem Zabihollah, Saki Rezwana and Reza Jazar
411	Development of a National Taxonomy of Road Risk Factors: a structured approach for interoperable road safety systems	Michelle Andrade, Carolina Noleto, Arlan Júnior, Diogo Nascimento and Camila Bessa
450	Driving Related Occupational risks and accidents Pattern in Telecom Sector, Saudi Arabia	Sajid Khan
464	Hybrid Patrol–Staging Optimization for Freeway Service Patrols Under Cost Control: A Deterministic MILP with Dynamic Segment	Mauricio Micolta, Evangelos Kaisar and Yao Cheng

Friday, June 26 – Lectern Sessions

Lectern session 31

Machine Learning for safety analysis

09:00 — 10:45

Room: Hall Leopoldo Massimilla

Chair: George Yannis, National Technical University of Athens, Greece

ID	Title	Authors
34	Interpretable Machine Learning for Municipal Road Safety: A Spatiotemporal Analysis of Crash Severity in Athens (2016–2020)	Eleni Maria Theodoraki, Paraskevi Koliou and George Yannis
135	A Graph Transformer Approach for Modeling Crash Occurrence at Intersections Using Telematics-Informed Road Networks	Simone Paradiso, Apostolos Ziakopoulos, Haris Sideris and George Yannis
227	Multi-Scale Crash Risk Estimation Using Naturalistic Driving Data: A Statistical and AI-Based Framework	Nuhamin Gezehagne Assefa, Benedetto Barabino, Roberto Ventura, Martina Carra and Giulio Maternini Maternini
253	Bus Stop Typology Reveals Crash Risk Environments	Tolu Oke, Alexandra Pate, Francis Tainter, Jimi Oke and Michael Knodler
487	Machine Learning Analysis of University Campus Transportation Behaviour and Sustainability Attitudes: An Exploratory Study from a MENA Region Institution	Omar Albatayneh, Dima A Husein Malkawi, Sahar Qadan and Mohammad Nadeem Akhtar

Lectern session 32

Traffic conflicts

09:00 — 10:45

Room: Hall Scipione Bobbio

Chair: Andrew Tarko, Purdue University, United States

ID	Title	Authors
24	Evaluating collision risk with unpredictable obstacles on transportation infrastructures: The CRASH model	Nicholas Fiorentini and Massimo Losa
63	Physics-informed Causal Graph Networks with Equivariant State Space Models for Conflict Prediction	Mohammad Tamim Kashifi, Yasir Ali, Anshuman Sharma and Haitao He
166	Characterizing Critical Vehicle Interactions in Lane-Free Traffic Using Extreme Value Theory and Data-Driven Modeling	Vineet Jain and Ashish Dhamaniya
400	A review on the role of machine learning in conflict-based studies	Isaac Ndumbe Jackai II, Tevoh Lordswill Ndingwan, Steffel Ludivin Feudjio Tezong, Davide Shingo Usami and Luca Persia
409	Lane change risk dynamics modeling based on geometry-aware safety potential field and multi-state survival analysis	Dachuan Zuo, Zilin Bian, Fan Zuo and Kaan Ozbay
468	Evasive Action-Based Bivariate Extreme Value Modeling for Rear-End Conflict Risk Estimation in Developing Country Context	Jinbao Zhang, Ninad Gore, Hassan Bin Tahir and Shimul Md Mazharul Haque

Lectern session 33

AI-based video analytics for road safety issues

09:00 — 10:45

Room: D

Chair: Shimul Haque, Queensland University of Technology, Australia

ID	Title	Authors
151	Rear-end crash risks involving heavy vehicles at signalised intersections by using AI-based video analytics and traffic conflict technique	Faizan Nazir and Shimul Md Mazharul Haque
162	An Extended Generalised Pareto model for joint estimation of moderate and extreme traffic conflict severity at signalised intersections using AI-based video analytics	Jash Modi, Zuduo Zheng, Ashish Bhaskar and Shimul Md Mazharul Haque
187	Conflict detection and analysis in urban arterial roads of Brasília, Brazil, using HD-CCTV monitoring cameras and the YOLO model	Julia Porto, Stella Roussou, Michelle Andrade, Apostolos Ziakopoulos and George Yannis
443	Scaling the Safe System: A Camera-Only Protocol for Lane-Resolved Speed Estimation via Metric Rectification of Existing CCTV Infrastructure	Amir Reza Safari, Angelo Coppola, Giorgio Acunzo, Luigi Massa and Gennaro Nicola Bifulco
463	An Implemented Multi-Component Computer Vision Framework for AI-Based Road Accident Prevention: Animal Detection, TWS Usage Monitoring, and Wrong Overtake Detection	Vithyasaji Sritharan, Sethmadu Sandeepa Samarakoon, Lahiru Theekshana Jayaweera, Samantha Rajapaksha and Kapila Dissanayaka

Lectern session 34

Traffic flow analysis

09:00 — 10:45

Room: E

Chair: Luigi Pariota, University of Naples Federico II, Italy

ID	Title	Authors
179	Lane-Specific Traffic Flow Analysis on Urban Motorways: Empirical Study and Model Development for Dual-Carriageway Roads	Bojan Jovanović, Marko Ševrović, Juraj Leonard Vertlberg, Marijan Jakovljević and David Gruhonjić
200	Spatio-Temporal Crash Risk Estimation on Urban Corridor Using UAV Trajectory Data and Non-Stationary Bivariate Extreme Value Modeling of Traffic Conflicts	Vishal Patel, Ninad Gore, Shriniwas Arkatkar and Said Easa
356	Application of Calibrated Probabilistic Vehicle-Spacing Models to Safety-Oriented Estimation of Critical Spacing on Two-Lane Roads	Andrea Pompigna, Giuseppe Cantisani, Raffaele Mauro and Giulia Del Serrone
380	Calibration and Application of the Intelligent Driver Model Parameters for Assessing Competent and Careful Driving Behaviour in Non-Critical Car-Following Scenarios	Kingsley Adjenughwure, Arturo Tejada, Pedro Oliveira, Jeroen Hogema, Gerdien Klunder and Erwin de Gelder
480	Analysis of Response Time in Car-Following-Bicycle Scenario Using Grouped Corelated Random Parameter Linear Regression	Ahsen Hamid, Yasir Ali, Anshuman Sharma and He Haitao

Lectern session 35

Naturalistic driving data and applications

09:00 — 10:45

Room: H

Chair: Angelo Coppola, University of Naples Federico II, Italy

ID	Title	Authors
80	Data-Driven Assessment of Distraction Behavior Among Drivers and Motorcyclists Using Smartphone-Based Naturalistic Data	Marija Ferko, Dario Babić, Tom Brijs, Bernard Kosovec, Ali Pirdavani and Darko Babić
83	Validation of Human Reference Models for Automated Driving in Cut-in Regulation Scenarios Using Test-track Data	Giovanni Albano, Marcello Montanino, Konstantinos Mattas, Biagio Ciuffo and Vincenzo Punzo
178	Driver Adaptation Patterns in Car-Following: A Preliminary Safety-II Analysis	Mohammad Pashaee, Eleonora Papadimitriou, Arturo Tejada and Pieter van Gelder
185	Understanding and Modelling the Duration of Distraction in Heterogeneous Traffic Conditions in a naturalistic setting: A correlated random parameters with heterogeneity in the mean approach	Neha Ingale, Udit Jain and Anshuman Sharma
407	Testing Highway Work Zone Design Solutions with Driving Simulation and Naturalistic Data: A Framework for Road Safety Evaluation	Pedro Huertas Leyva, Stefano Melzi, Massimiliano Nigro, Stefano Palladino, Federica Biassoni and Benedetto Carambia

Lectern session 36

Road safety management

09:00 — 10:45

Room: L

Chair: Mariusz Kiec, Cracow University of Technology, Poland

ID	Title	Authors
46	Crash Forecasting in Support of Proactive Safety Management— A Paradigm Shift	Simon Washington, Ashutosh Arun, Karen Giese, Michael Griffith, Bismarck Ledezma Navarro and Jason Deller
194	Potential Benefits of Road Safety Inspection: A Case Study in Serbia	Emir Smailović, Dalibor Pešić, Boris Antić, Krsto Lipovac and Neda Kočanović
319	Safety impacts of emerging mobility systems in mixed traffic: A multidimensional taxonomy integrating behavioural and cultural factors	Lazaros Giannakos, Konstantinos Fokeas, Pinelopi Alexiou, Anna Antonakopoulou and Angelos Amditis
353	Enhancing Evaluation Techniques for Victoria's Safe System Road Infrastructure Program (SSRIP): A Technical Review	Shane Turner, Amir Sobhani, Graham Wood and Bhagwant Persaud
477	From Injury Patterns to Risk Curves: A Data-Driven Study of Body Regions, Injury Producing Components, and Age Effects	Ritik Barua, Gerald Joy Alphonso Sequeira, Robert Lugner, Selvine George Mathias, Matthias Eckert and Thomas Brandmeier

Lectern session 37

Video analysis and digital image processing for vulnerable road users

11:15 — 13:00

Room: Hall Leopoldo Massimilla

Chair: Carol Flannagan, University of Michigan Transportation Institute, United States

ID	Title	Authors
84	Using extreme value theory to identify bicycle instability from video footage	Zhankun Chen, Carl Johnsson and Aliaksei Laureshyn
142	What Drives Crash Risk for Vulnerable Road Users in Mixed Traffic? An Extreme Value Theory Approach	Sambhav Goyal, Gabriel Lanzaro, Shriniwas Arkatkar and Tarek Sayed
153	Optimising Traffic Signal Timings for Safety and Mobility using Graph-based Reinforcement Learning	Muttahirul Islam and Shimul Md Mazharul Haque
177	Development of an automated tool-based on computer vision methods for safety assessment of micromobility users	Alejandra Sofia Fonseca Cabrera, David Llopis Castelló and Alfredo García
270	Assessing zebra crossing safety using video analytics	Puay Ping Koh, Jamie Cheong and Chandrasekar Palanisamy

Lectern session 38

Drivers' behaviour

11:15 — 13:00

Room: Hall Scipione Bobbio

Chair: Vittorio Ranieri, Polytechnic University of Bari, Italy

ID	Title	Authors
139	Dynamic Advertising on Vehicles: Evaluating Lateral Lane-Keeping and Safety Distance in Simulated Urban and Highway Scenarios	Lisa Zwicker, Daniel Eisele and Tibor Petzoldt
174	The traffic safety effects of busses running on the hard shoulder – a data driven and human factor evaluation	Emiel Soffers, Patrick Broeren and Sytze Rienstra
260	Mind Wandering Behind the Wheel: Theoretical and Measurement Issues and Preliminary Results from a Simulated Driving Study	Alessandro Caffo', Luigi Tinella, Sergio Traficante and Andrea Bosco
389	Identification of Harsh Braking Events among Long-Haul Truck Drivers: Prevalence, Risk Factors and Safety Implications	Kushal Khivansara, Sai Chand and Rahul Goel
422	Aggression and driving behavior patterns among court-referred young traffic offenders in Greece	Kyriaki Vagionaki, Stavroula Lioliou, Nektaria Pedioti, Marina Toraki, Georgios Markakis, Joannes Chliaoutakis and Maria Papadakaki

Lectern session 39

Road restraint systems

11:15 — 13:00

Room: D

Chair: Francesca La Torre, University of Florence, Italy

ID	Title	Authors
429	Research on Impact Performance and Cost Analysis of FRPReinforced Concrete Barriers	Pu Zhang, Jian Guan, Xianghua Tao, Tiezheng Guan and Lei Zhang
435	Innovative criteria for inspection, classification, and fixing of road restraint systems	Maria Rella Riccardi, Paolo Anfosso, Luca Biagini, Gavriel Caivano, Maria Francesca Casillo, Mariano Pernetti and Alfonso Montella
490	Crashworthiness Evaluation of Buried-in-Backslope Terminal Terrain Variations Using Finite Element Analysis	Sofokli Cakalli and Roger Bligh
491	Impact Severity Indices in Roadside Safety	Marco Anghileri
492	Use of Numerical Simulation for Certification of Road Restraint Systems: Validation, Applications and Limitations	Marco Anghileri

Lectern session 40

Safety modelling

11:15 — 13:00

Room: E

Chair: Robert Thomson, Chalmers University of Technology, Sweden

ID	Title	Authors
136	Modeling and Forecasting Road Accidents and Fatalities in Greece	Pavlos Gkougkoulis, Athanasios Theofilatos, Athanasios Fragkou, Marios Spiliotopoulos and George Yannis
283	Evaluation of the Road Condition Variables on Crash Frequency in Urban Malaysia: A Sensitivity-Based Modelling Approach	Elizabeth Eu Mee Chong, Rahma Mohamed Mkwata, Hon Sin Chin and Cassidy Morris
312	Effects of Car and Motorcycle Ownership on Road Traffic Fatalities: A Longitudinal Cross-national Study	Yu-Chiun Chiou and Wen-Hsuan Hsu
395	MultilCausalCrash: Multimodal large language model (MLLM)-assisted causal inference of traffic crash causation.	Zerun Liu, Ruixuan Zhang and Kaan Ozbay
465	A Data-Driven Analysis for the Determinants of Crash Occurrence at Railroad–Highway Crossings	Deo Chimba

Lectern session 41

Selection and prioritization of safety countermeasures

11:15 — 13:00

Room: H

Chair: Johan Vos, Delft University of Technology, The Netherlands

ID	Title	Authors
202	Simulated vs. video-derived traffic conflicts -- Are they telling the same story?	Cameron Mohammadi and Bhagwant Persaud
216	Using the Impact Modification Factor to Link Road Safety and Environmental Performance under the Safe System Approach	Stella Roussou, Apostolos Ziakopoulos, Maria Oikonomou, Amna Chaudhry, Amir Hossein Kalantari, Shanna Lucchesi, Amir Pooyan Afghari and George Yannis
217	A Scalable Machine Learning and Clustering-Based Framework for Evaluating and Prioritizing Countermeasures in Safe System Applications	Saumik Sakib Bin Masud, Bahareh Bakhti, Steven Buckley and Alexandra Kondyli
251	Safe System Countermeasure Tool (SSCT) for Supporting a Comprehensive Safe System Program	Raymond Kiefer, Andrew Leslie, Mauriat Miranda, Carol Flannagan, Robert Wunderlich, Srinivas Geedipally and Lingtao Wu
425	Evaluation of the Effectiveness of Urban Road Countermeasures using Driving Simulation: A Case Study on Left-Turn Maneuvers	Alessandro Calvi, Fabrizio D'Amico, Andrea Vennarucci, Federico Pompili and Francesco Bella

Lectern session 42

Automated driving field

11:15 — 13:00

Room: L

Chair: Vincenzo Punzo, University of Naples Federico II, Italy

ID	Title	Authors
127	Topic Discovery in Automated Driving System Field Test Crashes through LDA and Large Language Modeling	Isaac Baah and Mohamed M Ahmed
193	Toward Personalized Takeover Support Systems: Exploring the Effects of Driver Personal Traits and Trust in Conditionally Automated Vehicles	Ali Mostafavi, Wenge Xu, Oliver Carsten and Foroogh Hajiseyedjavadi
458	Virtual Testing of Automated Driving Systems through Credible Simulations	Riccardo Donà, Espedito Rusciano and Biagio Ciuffo
479	WTLD-Net: A Weather-Aware Temporal Lane Detection Network for Robust Autonomous Driving	Rutvikkumar Dave, Evangelos Kaisar and Fernando Koch

Friday, June 26 – Poster Sessions

Poster session 6

Towards the Safe System approach, part 2

09:00 — 10:45

Room: Atrium

Chair: Sergios Mavromatis, National Technical University of Athens, Greece

ID	Title	Authors
45	Are Multi-Bollard Systems Effective for Mitigating Risks at Bus Stops?	Jonathan Lazatin, Pouya Shojaei, Brendan O'Toole and Mohamed Trabia
342	Modeling Braking Severity in Heterogeneous Traffic Using UAV-Based Trajectory Data	Suraj Prajapat, Akshay Kumar and Anshu Bamney
338	Enhancing Safe Design Without Spirals in Mountainous & Rolling Terrain: Main & Compound Curves with Bilateral Transition Arcs	Antonios Trakakis, Vassilios Matragos, Konstantinos Apostoleris, Stergios Mavromatis, Basil Psarianos and Athanasios Antonopoulos
366	Integrating Geometric Design Consistency Measures for Road Safety: A Systematic Review and Framework Aligned with the Safe System Approach	Anu Roy, Said Easa and Shriniwas Arkatkar
377	Safety impact of automated driving in EU	Satu Innamaa and Henri Sintonen
383	Factors influencing the severity of run-off-road crashes in Croatia	Simone Fucito, Mohammad Ali Seyfi, Dario Babić, Carmelo D'Agostino, Filomena Mauriello and Hossein Nassif
386	Eco-safe driving as a safety strategy for heavy-duty vehicles: a simulator-based study	Patrizia Serra, Simone Podda, Mattia Porta and Gianfranco Fancello
408	An Interinstitutional Approach to Developing a National Interoperable Road Safety Data System in Brazil	Michelle Andrade, Márcio Camargos, Victor Pavarino and Júlio Pellizzon
421	Exploring the Relationship between Geometric-Related Factors and Crash Frequency on Interstate Highway Horizontal Curves Considering Spatial Heterogeneity	Junqing Wang, Zizheng Yan, Hong Yang and Kun Xie
439	Spiral Transitions Design Criteria for Rural Two-Lane Highways Based on Driving Simulator Experiments	Maria Rella Riccardi, Francesco Galante, Filomena Mauriello, Mariano Pernetti, Antonella Scarano and Alfonso Montella
441	A simulator evaluation of the effectiveness of spiral transitions in rural two-lane highways	Francesco Galante, Simone Fucito, Filomena Mauriello, Mariano Pernetti, Maria Rella Riccardi, Antonella Scarano and Alfonso Montella
459	A bibliometric review of research on safety of Connected and Automated Vehicles in mixed traffic conditions	Simone Fucito, Antonella Scarano, Maria Rella Riccardi, Francesco Galante and Alfonso Montella
474	Driving under pressure: Inducing stress in a driving simulation	Melanie Karthaus, Edmund Wascher and Stephan Getzmann
476	GoodRoad: A Crowdsourced Computer Vision Platform for Traffic Compliance	Nimesh Liyanage, Kanishka Rathnayake, Sanjula Wijerathna, Pabasara Hendawitharana and Mahima Weerasinghe
484	Scenario-Based Modelling of Transport Demand and Emissions for Sustainable Mobility in Saudi Arabia	Muhammad Shahid, Amjad Ali, Sikandar Abdul Qadir, Md Tasbirul Islam, Rahma Aman and Saddam Hussain

485	Bridging the Desert Divide: Sovereign NGSO Constellations for Enhanced Road Safety and ITS Connectivity in Algeria	Morsli Oumrani
495	A Game-Theoretical Framework for Evaluating Road Network Vulnerability and Safety Performance	Tahseen Bashir, Francesco Galante and Francesca Pagliara
603	Smart lanes evaluation through surrogate measures of safety: the case study of Bologna Ring Road, Italy	Luigi Pariota, Angelo Coppola, Luca Di Costanzo, Antonella Scarano, Ciro Buonocore, Mariangela Cicolani, Marilisa Conte, Flavia Scisciot and Alfonso Montella

Poster session 7

Towards the Safe System approach, part 3

11:15 — 13:00

Room: Atrium

Chair: Andrea Paliotto, University of Florence, Italy

ID	Title	Authors
55	Characterizing driver drowsiness in automated driving: A machine learning analysis of naturalistic driving data	Ajay Iyer, Amir-Pooyan Afghari and Eleonora Papadimitriou
89	Accuracy of stress level measurement by HRV in wrist-worn devices and their integration with subjective methods: Systematic Review	Nadezhda Ilina, Tiago Fonseca, Joana Guedes and Sara Ferreira
97	Examining the Potential of eCall to Reduce Injury Severity Outcomes: Evidence from Queensland, Australia	Heshani Rupasinghe, Hamza Zubair and Shamsunnahar Yasmin
98	Benchmarking forecast methods for safety-related traffic states	Antón Núñez-Seoane, Zhankun Chen, Pedro Arias and Joaquín Martínez-Sánchez
108	A low-budget road health monitoring system for prioritizing maintenance interventions	Stefano Coropulis
117	Exploring Inconsistencies in Lane Use: Factors Underlying Right-Lane Speed Advantage	Lamprini Koliou, Katerina Koliou and Ioanna Spyropoulou
124	LiDAR-Based Mapping and Pavement Condition Assessment for Safe System - Oriented Automated Mobility	Monica Meocci, Valentina Bonora, Francesca Milesi, Luca Colombo, Daniel Scabello and Emanuele Toraldo
155	Supporting Older Drivers through Intersection Design: A Human Factors Approach to Safer, More Inclusive Roads	Sophia Vardaki and Erdal Top
157	Does Road Health Affect Route Choices at Urban Level? A pilot study	Stefano Coropulis, Andrea Bosco, Alessandro Caffò, Paolo Intini, Nicola Introcaso, Sergio Traficante, Luigi Tinella and Vittorio Ranieri
159	Mismatch Between Perceived Driver Failure and Objective Risk in Simulated Lane-Change Scenarios	Sara Hong, Carl Johnsson, Carmelo D'Agostino and Ji Hyun Yang
161	Towards a Safe System Design for Physical Infrastructure in the Era of CCAM	Katerina Vakrinou, Eleni Mantouka and Eleni Vlahogianni
195	Assessing Traffic Conflict Indicators: An Integrative Review of Metrics and Thresholds for Proactive Safety Evaluation	Carolina Perna and Michelle Andrade
211	Effectiveness of Vienna DRIVESC tasks as a predictor of simulated 2 driving performance: a pilot study	Sergio Traficante, Luigi Tinella, Paolo Intini, Nicola Introcaso, Stefano Coropulis, Vittorio Ranieri, Andrea Bosco and Alessandro Caffò
213	Are telematics-based harsh occurrences associated with street-level visual features? A case study of motorway intersections	Julia Alves Porto, Apostolos Ziakopoulos, John Avgeros, Daniel Felipe López Velásquez and George Yannis
461	Road Safety Data and their production: A strategic imperative for the Safe System	Adrien Ndjetitem, Tarmadji Alladoum Chantal and Karndil Yagoua
494	Development and Initial Evaluation of an ESP32-Based Vehicle Impact Detection and GPS-SMS Alert System	Andrey Mascardo and Wendel Vilar

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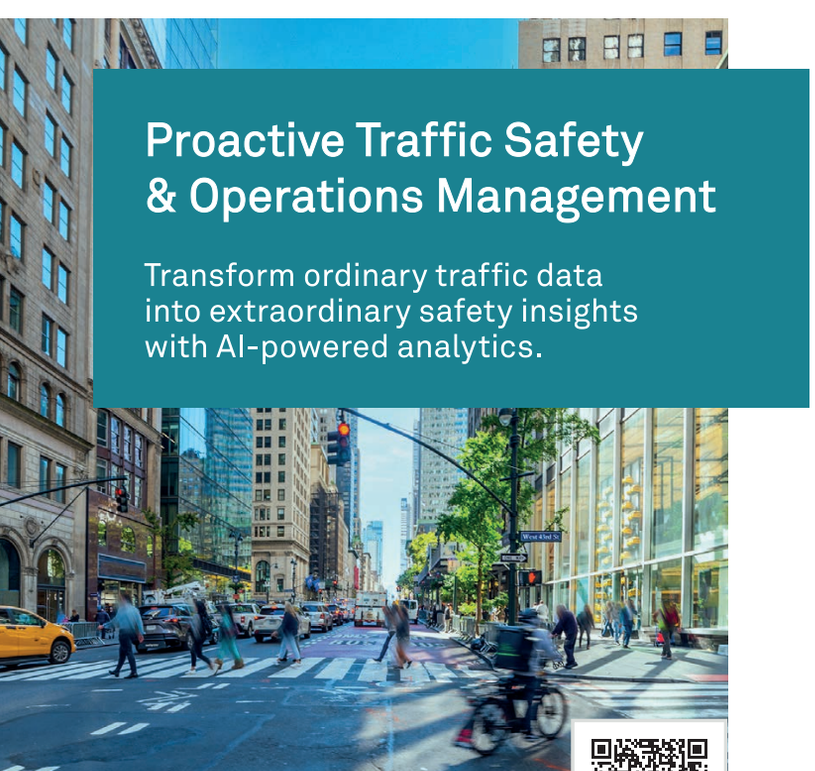

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