



Center of Excellence
for Road Traffic Safety



38th ICTCT Conference 2026

International Cooperation on Theories and Concepts in Traffic Safety

22-23 October 2026 | Zagreb, Croatia

Road Safety in the Age of AI: Innovations, Challenges,
and Opportunities



ICTCT 2026 at a glance

A two-day international conference in Zagreb, Croatia dedicated to proactive road safety, human factors, artificial intelligence and safer mobility for all road users.

The Faculty of Transport and Traffic Sciences (FTTS), University of Zagreb, serves as the local organiser of the 38th ICTCT Conference 2026. The event is supported by the Centre of Excellence for Road Traffic Safety, which strengthens scientific collaboration, applied research and knowledge exchange in the field of road safety.

WHEN

22-23 October 2026

WHERE

Hotel International
by Maistra City Vibes
Miramarska Cesta 24, Zagreb

IMPORTANT DATES

Abstract deadline: 10 April 2026
Early bird fee: until 10 August 2026
Regular fee: until 16 October 2026

RESEARCH COURSE

20-21 October 2026
Faculty of Transport and
Traffic Sciences
Vukelićeva ul. 4, Zagreb

More information:

<https://ictct.com.hr/>



About ICTCT

The International Cooperation on Theories and Concepts in Traffic Safety (ICTCT) is an international association aiming since 1988 at building up and sharing scientific knowledge on road safety, with a particular interest in methods that do not only rely on crash data but also on non-crash events.

ICTCT approaches safety as an integral part of the wider road traffic system, looking at all transport modes with a particular emphasis on vulnerable road users. It does this by organizing conferences, knowledge transfer opportunities, all aimed at a global professional audience.

ICTCT has a clear focus on proactive approach to road safety and is highly interdisciplinary. It welcomes researchers from different fields – transportation, mobility management, sustainability, engineering, psychology, public health, political sciences – to work together addressing road safety issues.

1988

registered since

30+

countries
represented

2006

courses given since

10+

institutional
members

45+

conferences
organized

40+

individual members

More information:

<https://www.ictct.net/>



Host institution and local organiser

Faculty of Transport and Traffic Sciences, University of Zagreb



Center of Excellence
for Road Traffic Safety

Faculty of Transport and Traffic Sciences

The Faculty of Transport and Traffic Sciences, University of Zagreb, is a leading Croatian higher education and research institution in the field of transport and traffic technology. It provides undergraduate, graduate and postgraduate education, and conducts scientific, professional and development research in transport, logistics and aeronautics.

Through its educational and research activities, the Faculty contributes to the sustainable development of transport systems, the economy and society, while strengthening national and international excellence in research and education.

Center of Excellence for Road Traffic Safety

The Center of Excellence for Road Traffic Safety was established by the Faculty of Transport and Traffic Sciences, University of Zagreb, on 24 January 2023. The Centre brings together scientific, professional, educational and consultancy expertise in the field of road safety.

Its work is based on the Safe System approach and focuses on safer road infrastructure, vehicles, road users, traffic management and post-crash response. Through applied research and cooperation with public and private partners, the Centre aims to support evidence-based and innovative solutions for improving road safety in Croatia and beyond.

More information:

<https://www.fpz.unizg.hr>

<https://ciscp.com.hr/>



Keynote speaker

Oscar Oviedo-Trespalacios, Ph.D.

Delft University of Technology



Keynote topic:

Ethical and privacy issues in road safety in the age of AI

Dr. Oviedo-Trespalacios is an Assistant Professor and Director of the Future of Mobility Program at TU Delft. His research focuses on Human Factors Engineering, road safety, responsible technology, and the impact of artificial intelligence on human behaviour and transport systems.

In his keynote, he will explore how AI-enabled and data-driven technologies are reshaping responsibility, behaviour, risk, and privacy in road safety, highlighting the need for ethical and human-centred approaches to AI governance.

Keynote speaker

Prof. Dr. Cristina Olaverri-Monreal

Johannes Kepler University Linz



Keynote topic:

Safer Roads Integrating Human Behaviour, Automation, and Data-Driven Systems

Professor Cristina Olaverri-Monreal is a Full Professor and Head of the Department of Intelligent Transport Systems at Johannes Kepler University Linz, Austria. Her work focuses on intelligent transportation, automated mobility systems, human factors, wireless communication and sensing technologies.

She is the IEEE Division IX Director and a member of the 2026–2027 IEEE Board of Directors, and previously served as President of the IEEE Intelligent Transportation Systems Society.

Her keynote lecture will provide insights into emerging solutions, including simulation-based safety assessment, and V2X-enabled coordination, while outlining an integrated approach where technology and human behaviour are co-designed to achieve safer and more resilient mobility systems.

Walk & Talk and Welcome Event

Start your ICTCT 2026 experience by getting to know the people behind the research. The ICTCT Walk & Talk is an informal networking activity combining a walk through the centre of Zagreb with short conversations between conference participants. The walk ends at Pivana, where the Welcome Event will take place.

DATE WEDNESDAY 21 OCTOBER 2026	START MEETING POINT - 16:00 Main Train Station King Tomislav Monument	END WELCOME EVENT - 18:00 Pivana Ilica 222, Zagreb
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Route and highlights

Participants will walk through the city in pairs and have short, informal conversations with different ICTCT colleagues. Approximately every 5–7 minutes, participants will change partners, creating an opportunity to meet several members of the ICTCT community along the way.



16:00

START
King Tomislav Monument
(Main Train Station)



16:10

Zrinjevac Park



16:20

Ban Jelačić Square
(City centre)



16:35

Stone Gate
(Kamenita vrata)



16:45

St. Mark's Square



17:00

Lotrščak Tower & Strossmayer Promenade



17:15

Grič Tunnel
Radićeva–Mesnička



18:00

END
Arrival at Pivana
(Address: Ilica 222)

FOOD AND DRINKS

Conference participants are invited to enjoy a complimentary selection of food and drinks as part of the Welcome Event. Please note that food and drinks will be available in limited quantities.

38th ICTCT Conference 2026 - Zagreb, Croatia - Final programme

DAY 1 — Thursday, 22 October 2026									
08:15-09:00		Registration & Coffee							
09:00-09:15		Welcome speeches — Hall "Market"							
09:15-10:15		KEYNOTE 1 — Cristina Olaverri-Monreal (JKU Linz): "Safer Roads: Integrating Human Behaviour, Automation, and Data-Driven Systems" — Hall "Market"; Chair: Stijn Daniels (KU Leuven)							
10:15-10:30		Coffee break — rooms split into Market 1 / Market 2 / Next Level							
10:30-11:30	Oral Session 1A – Market 1			Oral Session 1B – Market 2			Oral Session 1C – Next Level		
	Topic: AI in road safety; Chair: Dario Babic (University of Zagreb)			Topic: Driving Simulations; Chair: Salvatore Cafiso (University of Catania)			Topic: Driving Simulations; Chair: Giuseppina Pappalardo (University of Catania)		
	1	Claire Naude	Automatic Detection of Geometric Anomalies in Speed Humps Using Machine Learning on Vehicle Dynamics Data	1	İbrahim Öztürk	Improving Young Novice Drivers' Hazard Anticipation Skills: Simulator and Questionnaire Evaluations of the impacts of Driver Training over time	1	Michael van Eggermond	Salience, Effort and Expectancy at Intersections: How Infrastructure Design Affects Driver Perception of Cyclists
	2	Arpit Jadon	Know What You Ask – Evaluating LLM-Assisted Decision Support for Road Safety Practitioners	2	Daniel Eisele	Cycling Infrastructure at Permissive Signalized Intersections: A Simulator Study on Objective and Subjective Safety of Cyclists and Drivers	2	Abrar Hazoor	How Safe Are Takeover Control Mechanisms in Conditionally Automated Vehicles under Distracted Conditions?
	3	Annika Lux	Recognizing Cyclists' Signals: What Automated Systems can learn from Human Perception	3	A. Marie Harkin	Effects of Bicycle Infrastructure on Cyclists' Experience and Behaviour in Roundabouts	3	Monica Meocci	The Effect of Alcohol Impairment on Visual Attention During Critical Events in Road Safety
4	Víctor de Lucas Maisanaba	AI Based Road Safety Management Platform for Network Level Decision Support on Spain's Conventional Road Network	4	Luca Tefa	Safety of driver-pedestrian interactions along urban frontage roads with shared lanes	4	Ágoston Pál Sándor	How In-Vehicle Tablet Interface Design Influences Driver Eyes-Off-Road Behavior: Eye-Tracking AOI Analysis in Simulation	
11:30-11:45		Coffee break							
11:45-12:45	Oral Session 2A – Market 1			Oral Session 2B – Market 2			Oral Session 2C – Next Level		
	Topic: Human Factors, Pedestrians, and Drivers; Chair: Aliaksei Laureshyn (Lund University)			Topic: Safety data processing; Chair: Clemens Kaufmann (Factum)			Topic: Driving Simulations; Chair: Marija Ferko (University of Zagreb)		
	1	Ruben A. Kuipers	Threading the needle: A study into gap acceptance for car-cyclist interactions	1	Ozlem Simsekoglu	Gender differences in intention to use shared micromobility (SMM)	1	Salvatore Cafiso	Drivers' Trust in Proactive V2I Warning Systems at Complex Urban Intersections: A Driving Simulator Study
	2	Michael Oehl	Highly automated vehicles' implicitly and explicitly communicated intents to interact with pedestrians and pedestrians' appraisals across different cultures – Is universal design of these interfaces appropriate, and what should be taken into account?	2	Katia Pagle	Crowdsourced Pavement Intelligence for Safer Urban Cycling Infrastructure: Platform Development and Pre-Pilot Evaluation within the CAMBER Project	2	Mahdi Sadeqi Bajestani	Evaluating Low-Cost Safety Interventions in School Zones: A Driving Simulator Study
	3	Anja Katharina Huemer	Why Do Road Users Break the Rules? Motivations Behind Cycling-Related Traffic Violations	3	Muhammad Waqas Ahmed	Introducing a Drone-based, Synthetic Road-user Trajectory Simulation for Road Safety Analysis	3	Giuseppina Pappalardo	Behavioural Effects of a Bicycle-Mounted Collision Warning Device at a Simulated Intersection with Limited Sight Distance
4	Thomas Wold	Confident but vulnerable: Insights on young motorcyclists' decision-making and riding behaviour	4	Hiba Nassereddine	Prevalence of Rule Violations by and Against Cyclists: A Comparison of Self-Reported and Crash Data				
12:45-13:00		Group picture							
13:00-14:00		Lunch							
14:00-15:15	Poster Session 3A – Market 1			Poster Session 3B – Market 2			Special Session – Next Level		
	Topic: SMOs / Safety Analysis			Topic: AI in road safety & Driving Simulations			Topic: Centre of Excellence for Road Traffic Safety (CERTS) at Faculty of Transport and Traffic Sciences, University of Zagreb		
	1	Clemens Schicktzanz	Assessing the Potential of Small Open Vision-Language Models for Traffic Conflict Criticality Assessment: A Comparative Study of Unprotected Left-Turn Interactions with Oncoming Traffic	1	Annika Lux	Capturing Cyclists' Driving Errors – privacy-compliant methods, insights, and infrastructure approaches concerning AI	1	Željko Šarić (UNIZG-CERTS)	Centre of Excellence for Road Traffic Safety (CERTS): vision, governance structure and CERTS laboratories
	2	Giuseppina Pappalardo	Spatial Analysis of Cyclist-Related Road Accidents in Urban area	2	Daniel Pavleski	Understanding the Relationship Between Modal Split and Road Safety: A Machine Learning Approach	2	Helena Dejanović Škvarić (UNIZG-CERTS)	Presentation of the project "Professionalisation of the Centre of Excellence for Road Traffic Safety"
	3	Victoria Gitelman	Analyses of automatically-generated data on e-scooter behaviours to characterize the safety level of urban sites and estimate safety-related interventions	3	Attila Borsos	What makes a bicycle simulator valid for experimental research - a state-of-the art review	3	Dario Babić (UNIZG-CERTS)	Presentation of Horizon Europe TWIN-SAFE project "Advancing Road Safety Through Twinning"
	4	Ebru Bölük	Cycling Safety in One-Way Streets: Insights from OSM and Crash Data	4	Siri Hegna Berge	Trust and perceived safety in shared automated vehicles: User experiences from a public transport pilot in Oslo			
	5	Jifi Ambros	Disentangling the relationship between driving speed, road infrastructure and traffic safety	5	Markus Strigel	Objective and subjective safety at urban signalized intersections: A simulator study on effects of infrastructure and traffic signal control for car drivers and cyclists			
	6	Yen-Lin Huang	Safe Speed for Roads with Mixed Cars and Motorbikes						
15:15-15:30		Coffee break							

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15:30-16:30	Poster Session 4A – Market 1			Poster Session 4B – Market 2			Special Session – Next Level		
	Topic: Human Factors, Pedestrians, and Drivers			Topic: Infrastructure Safety			Topic: From Research to Impact — Knowledge Centre and the DIGIT Project		
	1	Fatemeh Siar	RoadBehave: Monitoring Multi-User Riding Behavior	1	Leonid Ljubotina	Cycling the edge: state-of-the-art review on hard shoulder cycling practices across EU and USA	1	Carmelo D'agostino	Building the partnership: from TWIN-SAFE to a joint knowledge centre
	2	Amira Hammami	Real Eyes, Realize, Real Lives: Do Smart Crossings Actually Guide Driver Attention?	2	Alejandra Sofia Fonseca Cabrera	Perceived safety of edge elements in micromobility infrastructure	2	Dario Babić (UNIZG-CERTS) Carmelo D'agostino (Lund University) Tom Brijs (Hasselt University)	What we do: Research highlights from FTTS, Hasselt and Lund
	3	David Llopis Castelló	Trajectory analysis of micromobility users in horizontal curves	3	Juliane Anke	Platform work by bicycle: Road safety of delivery riders in Germany	3	Tom Brijs (Hasselt University)	Open discussion: When is a road safety system actually a Safe System?
	4	Alev Aktas	The Turkish adaptation of the Cycling Anger Expression Inventory (CAX) and its associations with cycling behavior and risk perception	4	Jan Elgner	Accounting for temporal variations of driving speed			
	5	Samir Hussein Ali Mohammad	Why do drivers misidentify whether their vehicles have ADAS?	5	Katarina Krišto	Spatial Distribution of Traffic Accidents Across Modal Interactions in Zagreb, Croatia			
	6	Niyazi Özgür	Medical Insight into Micromobility Related Accidents in Relation with Urban Network Topographies	6	Ivana Selak	Nighttime visibility of pedestrian crossings: field evaluation of road marking materials and glass beads			
16:30-17:30Meeting of ICTCT sub-committee on on bicycle simulator research - Hall "Dialog"; Chair: Attila Borsos (University of Győr)									
19:00-23:30Conference dinner - Restaurant Lobby (Ul. Ivana Lučića 2, Zagreb) - 7 min by foot from conference venue (Hotel International)									

DAY 2 — Friday, 23 October 2026									
8:00-9:00		Meeting of ICTCT sub-committee on surrogate measures of safety (SMoS) - Hall "Dialog"; Chair: Aliaksei Laureshyn (Lund University)							
08:30-09:15Registration & Coffee									
9:15-10:30	Poster Session 6A – Market 1			Poster Session 6B – Market 2			Poster Session 6C – Next Level		
	Topic: Safety applications & measures			Topic: Safety applications & measures			Topic: Safety applications & measures		
	1	Nicolas Saunier	COVID-19 effects on road safety and driving behaviours	1	Sándor Ágoston Pál	Black Box on Two Wheels: ABIDA as a Multimodal Platform for Cyclist Behaviour and Physiological Monitoring	1	Jean Naika	Understanding behavioural factors contributing to risky riding among motorcycle taxi riders in Kampala, Uganda.
	2	Hilde Kjelsrud	Professional Learning and Identity Construction Among Heavy- Vehicle Driving Teacher Students	2	Fabian Niemann	Can Able-Bodied Participants Serve as Proxies for Mobility Aid Users in Laboratory Studies of Inclined Walkways?	2	Hiba Nassereddine	How Accessible Are Inclined Walkways? Evidence from Mobility Aid Users' Experiences and Field Observations
	3	Rosemond Nyansafo	Temperament Behind The Wheel: A Psychological Analysis Of Personality And Driving Behaviour In Urban Traffic Contexts	3	Andrea Paliotto	Systematic Review of speed evaluation and monitoring methods for road safety: a decade of research	3	Anton Pashkevich	Psychological quality of urban public space: towards a methodology to evaluate inclusive and resilient urban environments
	4	Niyazi Özgür	Development of a Novel Wearable Instrumentation System for Micromobility Studies	4	Clemens Schickanz	Analysis of crashes using detailed exposure data: A Case Study of the city of Braunschweig	4	Mio Suzuki	A Study on Driving Behavior Characteristics of MCI drivers on Public Roads
	5	Sonia Zajac	The role of microscopic traffic flow simulation in defining the scope of application for multi-purpose lanes (2-1 road): the case of the "MehrzweckSicher" project	5	Tina Cvahte Ojstersek	Legal awareness and non-compliance in e-scooter riding surfaces: evidence from Slovenia	5	Şerife Yılmaz	Cycling in Türkiye: Gendered Use Patterns, Risks, Interactions, and Perceived Stigma
	6	Tijmen den Blaauwen	Between Feeling and Reason: A Scoping Review of Questionnaire-Based Measurements of Traffic Risk Perception	6	Arash Hassani	Validation of Point Cloud of Active Road Users LiDAR Tracking Data for Road Safety Assessment	6	Rakshita Verma	Identification of Intersection Influence Zones for Cyclists at Unsignalised Intersections Using Instrumented Bicycle Data
7	Marija Ferko	Behavioral adaptation to automated speed enforcement: a study using naturalistic smartphone-based data from car drivers and motorcyclists	7	Carmelo D'agostino	Crash Frequency Modelling for Italian Road Tunnels				
10:30-11:00		Coffee break							
11:00-12:00	Oral Session 9A – Market 1			Oral Session 9B – Market 2			Oral Session 9C – Next Level		
	Topic: Safety applications & measures; Chair: Attila Borsos (University of Győr)			Topic: Safety data processing; Chair: Stijn Daniels (KU Leuven)			Topic: Infrastructure Safety; Chair: Darko Babic (University of Zagreb)		
	1	Stefan Bohmann	How Steep Is Too Steep? Experimental Evidence on the Usability of Inclined Walkways for Mobility Aid Users	1	Isaac Ndumbe Jackai II	A Conflict-Based Diagnostic Framework for Signalized Intersections Integrating Conflict Characteristics and Signal Phases	1	Stefan Bohmann	Assessment of Subjective Safety and Comfort in Cycling: Development and Validation of the SuSyCo Scale
	2	Anamarija Poll	Age-Related Differences in Road Crash Characteristics: Evidence from Slovenia	2	Tove Hels	Cyclist and pedestrian self-reported accidents – patterns and prevention efforts	2	Nino Chkhartishvili	Behavioural Responses to a Light Rail Crossing Warning System: Qualitative Insights from Helsinki
	3	Assaf Sharon	An evaluation study of the safety effects of an advanced training course for motorcycle riders	3	Nicolas Saunier	Video-Based Analysis of Crossing Behavior of Pedestrians with Assisting and Walking Devices at a Signalized Intersection	3	Armin Kollascheck	Lane change behaviour at turbo roundabouts with markings for lane delineation
4	Matilda Magnusson	Acceptance of road safety measures across citizens, professionals, and politicians	4	Torkel Bjornskau	Pedestrian Falls and Collisions: Preliminary Findings from a Norwegian Injury Registration Study	4	Borislav Hristov	Gaze behavior of male and female drivers at crosswalks	
12:00-13:00		Lunch							

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13:00-14:00	KEYNOTE 2 — Oscar Oviedo-Trespalacios (TU Delft): "Ethical and privacy issues in road safety in the age of AI" — Hall "Market"; Chair: Anja Katharina Huemer (Universität der Bundeswehr München)										
14:00-14:15	Coffee break										
14:15-15:15	Oral Session 8A – Market 1					Oral Session 8B – Market 2					
	Topic: Human Factors, Pedestrians, and Drivers; Chair: Anton Pashkevich (Politechnika Krakowska)					Topic: SMOs / Safety Analysis; Chair: Aliaksei Laureshyn (Lund University)					
	1	Eduardo Nesi	Pedestrian behavior at the crosswalk and their interaction with an automated vehicle: a full-scale experiment			1	Aslak Fyhri	Perceived Traffic Safety in Urban Areas: Implications for Low- and Middle-Income Countries			
	2	Alejandra Sofia Fonseca Cabrera	Gender differences in speed behaviour on horizontal curves in micromobility infrastructure			2	Attila Borsos	Applicability of TTC and PET for Pedestrian–Vehicle Interactions: Conflict Analysis Using Extreme Value Theory			
	3	Giuseppe Marinelli	Comparative Analysis of Adaptive Cruise Control Performance Across Vehicle Brands			3	Fabian Niemann	Beyond Compliance: Subjective Legitimacy of Traffic Rule Violations Involving Cyclists and Drivers			
	4	Tina Cvahte Ojstersek	Training and driving test outcomes among accompanied driving candidates			4	Bhavna Katoch	Conflict Analysis in Urban School Zones using Surrogate Safety Measures			
15:15-15:45	Closing session & Announcement ICTCT 2027 — Market 1										
18:30	Social event - Fakin Craft Bar (Ul. grada Vukovara 68, Zagreb) - 6 min by foot from conference venue (Hotel International)										

Committees

Local organisation committee

Dario Babić, president	Maja Sovina
Željko Šarić	Gabrijela Ivanjko
Luka Novačko	Lucija Franković
Darko Babić	Nikola Kožul
Ivana Vuk	Bernard Kosovec

Scientific committee

1. **Niels Agerholm**, Denmark
2. **Jiří Ambros**, Czech Republic
3. **Jan Andersson**, Swedish National Road and Transport Research Institute, Sweden
4. **Dario Babić**, University of Zagreb, Croatia
5. **Darko Babić**, University of Zagreb, Croatia
6. **Attila Borsos**, Hungary
7. **Salvatore Damiano Cafiso**, Italy
8. **Stijn Daniels**, Belgium
9. **Evi Dons**, Vias Institute, Belgium
10. **Anja Katharina Huemer**, Germany
11. **Richard van der Horst**, Honorary member since 2013, the Netherlands
12. **Clemens Kaufmann**, Apptec venture FACTUM GmbH, Austria
13. **Aliaksei Laureshyn**, Lund University, Sweden
14. **David Duarte Lima**, Brazil
15. **Rob Methorst**, Honorary member since 2016, the Netherlands
16. **Giuseppina Pappalardo**, Italy
17. **Anton Pashkevich**, Poland

38th ICTCT Conference 2026

Zagreb, Croatia

Venue

Hotel International by Maistra City Vibes
Miramarska Cesta 24
10000 Zagreb, Croatia



Contact and website

info@ictct.com.hr
<https://ictct.com.hr/>

Thank you for joining us in Zagreb
We wish you a productive and inspiring ICTCT 2026 Conference

