

Workshop on Computational Models of Human Road User Behavior for Evaluation of Automated Vehicles

September 15, 2026, Naples, Stazione Marittima, Room Calipso

[Abstracts of contributed talks and most recent schedule are available at https://roadusermodels.github.io/](https://roadusermodels.github.io/)

Session	Start	End	Duration (min)	Item Type	Speaker(s)	Affiliation	Presentation Title / Topic
Session 1. Chair: Arkady Zgonnikov	8:30	8:40	10	Logistics	Arkady Zgonnikov	TU Delft, Organizer	Welcome, Workshop Objectives & Agenda
	8:40	9:10	30	Keynote	Biagio Ciuffo	European Commission – JRC	Driving behaviour models to operationalize the international regulatory framework for AV safety approval
	9:10	9:40	30	Keynote	Hiroki Nakamura & Sou Kitajima	Japan Automobile Research Institute (JARI)	Defining Safety Boundaries for Automated Driving Systems: From real traffic data to computational human road-user models
Session 2. Chair: Jonas Bärgman	9:40	10:00	20	Contributed	Julian Frederik Schumann	TU Delft	Active Inference as a model of human driving behavior
	10:00	10:20	20	Contributed	Arturo Tejada Ruiz	TNO	Bending the (traffic) rules, competent driver style!
	10:20	10:40	20	Contributed	Giovanni Albano	Univ. of Naples Federico II	Risk perception and braking reaction model of competent and careful human drivers in safety-critical cut-in scenarios
	10:40	11:00	20	Contributed	Federico Scari	RDW	A Scenario-Based Grading Framework for ADS/ADAS Consumer-Testing Campaigns Benchmarked Against a Probabilistic Human Driver Model
Break	11:00	11:30	30	Coffee Break			
Session 3. Chair: Gustav Markkula	11:30	12:00	30	Keynote	Jonas Bärgman	Chalmers Univ. of Technology	Representativeness in ADS safety impact assessment (and training): baseline and traffic-agent challenges
	12:00	12:30	30	Keynote	Manel Hammouda	BMW Group	Cognition and Reward: A Dual Perspective on Driver Behavior Modeling
	12:30	12:50	20	Contributed	Yueyang Wang	Univ. of Leeds	Task-oriented scoring of driver behaviour models for automated driving systems evaluation
	12:50	12:53	3	Teaser talk	Malin Svärd	Volvo Cars	Quantification of Human Acceleration Behavior across Speeds Using Real-World Driving Data
	12:53	12:56	3	Teaser talk	Konstantinos Mattas	European Commission – JRC	Combining Evasive and Braking Reactions for Safety Reference Models in Automated Vehicles
	12:56	12:59	3	Teaser talk	Samir Mohammad	TU Delft	General-purpose LLMs as Models of Human Driver Behavior: The Case of Simplified Merging
Break	13:00	14:00	60	Lunch Break			
Session 4. Chair: Luigi Pariota	14:00	14:30	30	Keynote	Gustav Markkula	Univ. of Leeds	Mechanistic, machine-learned, and hybrid modelling of road user behaviour
	14:30	14:50	30	Keynote	Johan Engström	Waymo	SAE J3330: Toward a shared language for driving behavior reference models
Break	15:00	15:15	15	Break			
Session 5. Chair: Johan Engström	15:15	15:35	20	Contributed	Arash Tavakoli	Villanova Univ.	Driver World Models: Unified Representations of Drivers in Semi-Automated Driving
	15:35	15:55	20	Contributed	Christian Rössert	cogniBIT GmbH	Beyond benchmark metrics: a cognitive driver model as a behavioral reference for AV evaluation
	15:55	16:15	20	Contributed	Kevin Kefauver	VTTI	Prudent Attentive Sober (PAS) Driver Definition in US National Crash Data and its Application to Human Behavioral Models
	16:15	16:35	20	Contributed	Saeed Rahmani	TU Delft	Drive with Style: Style-Conditioned Self-Play for Behaviorally Diverse Traffic Simulation
Break	16:35	16:45	10	Break			
Session 6. Chair: Shu-Yuan Liu	16:45	17:35	50	Discussion	Shu-Yuan Liu, Arkady Zgonnikov	Moderated by Organizers	Interactive Breakout Groups & Plenary Synthesis
	17:35	17:45	10	Logistics	Arkady Zgonnikov	Organizing Committee	Closing Remarks