



Human Factors and
Ergonomics Society
EUROPE CHAPTER

Annual Meeting 2022

”Enhancing Safety Critical Performance“

April 20-22, 2022

MUSEO NAZIONALE DELL' AUTOMOBILE

TORINO – ITALY



PROGRAMME



Human Factors and
Ergonomics Society
EUROPE CHAPTER

Organization Committee 2022

Antonella TOFFETTI

STELLANTIS - CRF, Torino (IT)

Stephen FAIRCLOUGH

Liverpool John Moores University (UK)

Karel BROOKHUIS

University of Groningen (NL)

Dick DE WAARD

University of Groningen (NL)



Wednesday April 20 - MORNING

08.30 - 09.15	Registration Welcome coffee	
09.15 - 09.30	CONFERENCE OPENING	Antonella Toffetti STELLANTIS - CRF Stephen Fairclough Liverpool John Moores University
09.30 - 10.50	Session 1: AUTOMATION 1	<i>Chair:</i> Stephen Fairclough Liverpool John Moores University
09.30 - 09.50	The Influence of Anthropomorphism on the Dynamics of Trust in task related Human-Robot Interaction	Eileen Roesler Technische Universität Berlin
09.50 - 10.10	Adaptable automation and its effect on perceived competence and autonomy	Michèle Rieth University of Bremen
10.10 - 10.30	Critical decision making with a highly automated UAV – A case study	Nicolas Maille ONERA
10.30 - 10.50	Effects of risk on operator's verification in interaction with information and decision automation	Steffen Hösterey Humboldt-Universität zu Berlin
10.50 - 11.20	Posters set up Coffee break	
11.20 - 12.40	Session 2: SURFACE TRANSPORTATION	<i>Chair:</i> Karel Brookhuis University of Groningen
11.20 - 11.40	Do you bike virtually safe? An explorative VR study assessing the safety of bicycle infrastructure	Marc Schwarzkopf Technische Universität Chemnitz
11.40 - 12.00	Braking Bad – How E-Scooter Ergonomics Relate to Riders' Braking Behaviour	Felix Siebert Technical University of Denmark
12.00 - 12.20	In-depth analysis of van crashes	Mette Møller Technical University of Denmark (DTU)
12.20 - 12.40	Do drivers want to enhance their safety-critical behaviours? A study on the acceptability of driving monitoring and feedback	Angèle Picco University of Groningen
12.40 - 13.40	Lunch	



Wednesday April 20 - AFTERNOON

13.40 - 15.00	Session 3: HUMAN - ROBOT TEAMS	<i>Chair:</i> Dietrich Manzey TU Berlin
13.40 - 14.00	Ten seconds to go! – Effects of feedback systems in human-robot collaboration	Dorothea Langer Chemnitz University of Technology
14.00 - 14.20	Humans can't resist - reflexive cueing with robot stimuli	Linda Onnasch Humboldt-Universität zu Berlin
14.20 - 14.40	Supporting spatially dispersed teams with AR-based Avatars: Increasing co-presence by interacting avatars	Lisa Thomaschewski Ruhr University Bochum
14.40 - 15.00	Development of Teamwork Processes, Collective Orientation and Stress during a simulated Mars Mission in the Crew and Support Teams	Vera Hagemann University of Bremen
15.00 - 15.30	Coffee break	
15.30 - 16.30	Session 4: HIGHLY AUTOMATED VEHICLES 1	<i>Chair:</i> Dick de Waard University of Groningen
15.30 - 15.50	Manoeuvre design in automated driving: Investigation of on-ramp situations under the variation of safety distances and traffic flow	Konstantin Felbel Chemnitz University of Technology
15.50 - 16.10	Evaluation of Imminent Take-Over Requests With Real Automation on a Test Track	Philipp Wintersberger TU Wien
16.10 - 16.40	Humanising Regulation on AVs	Rino Brouwer & Oliver Carsten NL Ministry of Infrastructure and Water Management
16.40 - 17.10	TALKING POSTER Session - All poster presenters have 20 seconds to promote their posters	Dick de Waard University of Groningen
17.10 - 18.15	POSTER Session, authors present at their posters	
18.00 - 19.00	Refreshment	
18.30 - 19.15	Europe Chapter HFES Business Meeting [Executive Council, Chapter Members are welcome]	



Thursday April 21 - MORNING

08.45 - 09.00	Welcome coffee	
09.00 - 10.40	Session 5: AVIATION AND MARITIME HUMAN FACTORS	<i>Chair:</i> Linda Onnasch Humboldt-Universität zu Berlin
09.00 - 09.20	Diver's executive functions at 30 m water depth and after return to surface: Are they impaired, and for how long?	Stefan Röttger Naval Institute for Maritime Medicine Department for Naval Psychology and Ergonomics
09.20 - 09.40	The occurrence of miscues by decision support systems: A study with airport security screeners supported by automated explosives detection systems for cabin baggage screening	David Huegli Univ. of Applied Sciences and Arts Northwestern Switzerland and Univ. of Fribourg
09.40 - 10.00	Artificial Intelligence (AI) implementation in aviation industry. The transition from Extended Minimum Crew Operations (e-MCO) to Single Pilot Operations (SiPO)	Dimitrios Ziakkas Purdue University
10.00 - 10.20	Pilot's representation of dynamic situation in aviation, toward a visuospatial anticipation span	Marianne Jarry Centre de Recherche de l'Ecole de l'Air
10.20 - 10.40	The effects of workload and time on task on detection performance in X-ray cabin baggage screening	Daniela Buser Univ. of Applied Sciences and Arts Northwestern Switzerland
10.40 - 11.10	Coffee break	
11.10 - 12.30	Session 6: AUTOMATION 2	<i>Chair:</i> Anja Naumann Deutsches Zentrum für Luft- und Raumfahrt DLR
11.10 - 11.30	Under Pressure—Effects of Time Pressure and Automation Support in a Simulated Medical Visual Search Task	Tobias Rieger Technische Universität Berlin
11.30 - 11.50	An Experimental Study on Workstation Characteristics in Industrial Human-Robot Collaboration	Federico Fraboni University of Bologna
11.50 - 12.10	Human-automation interaction challenges in remote operation of heavy vehicles – findings from a simulator study	Jonas Andersson RISE Research Institutes of Sweden
12.10 - 12.30	Mind the automation knowledge gap – Public and Experts' acceptance of unattended train operation	Kristin Mühl German Centre for Rail Traffic Research (DZSF)
12.30 - 13.30	Lunch	



Thursday April 21 - AFTERNOON

13.30 - 14.50	Session 7: HUMAN FACTORS IN HEALTHCARE	<i>Chair:</i> Francesco Di Nocera Sapienza University of Rome
13.30 - 13.50	Do Human Factors and Ergonomics (HFE) methods actually work? Testing the reliability, validity, and usability of HFE methods in healthcare practice	Paul Salmon University of the Sunshine Coast, Australia
13.50 - 14.10	Towards Fast AI-Infused Human-Centred Contouring Workflows for Adaptive Proton Therapy in the Head and Neck	Nicolas Chaves-de-Plaza TU Delft
14.10 - 14.30	Nurses' Annoyance of Medical Device Alarms	Idil Bostan TU Delft
14.30 - 14.50	Visualising real-time social network data to promote healthcare teams: Team-technology interaction as a trigger to a digital intervention's acceptance and transfer intention	Marco De Angelis University of Bologna "Alma Mater Studiorum"
14.50 - 15.20	Coffee break	
15.20 - 16.40	Session 8: HIGHLY AUTOMATED VEHICLES 2	<i>Chair:</i> Rebecca Wiczorek TU Berlin
15.20 - 15.40	Being chauffeured in the Vehicle-in-the-Loop: Passenger interactions with vulnerable road users at an urban junction	Vanessa Stange TU Braunschweig
15.40 - 16.00	Designing sounds to support visual HMI for automated vehicles: A study for truck drivers	Soyeon Kim Delft University of Technology
16.00 - 16.20	User experience of a self-driving minibus - Reflecting vision, state and development needs of automated driving in public transport based on passenger surveys in the project	Annika Dreßler DLR Institute of Transportation Systems
16.20 - 16.40	The Influence of Vestibular Feedback on Transitions between different Levels of Automation	Pia Wald Technical University of Munich
16.40 - 16.45	KEYNOTE INTRODUCTION	<i>Chair:</i> Stephen Fairclough Liverpool John Moores University
16.45 - 17.30	KEYNOTE Neuroergonomics for flight safety	Prof. Frédéric Dehais Institut Supérieur de l'Aéronautique et de l'Espace ISAE



Friday April 22

09.15 - 09.30	Welcome coffee	
09.30 - 10.50	Session 9: EVALUATING HUMAN PERFORMANCE AND USER EXPERIENCE	<i>Chair:</i> Denis Coelho Jönköping University
09.30 - 09.50	Design Insights for a Videoconferencing Intervention to Facilitate Social Connectedness for Older Adults	George Mois University of Illinois Urbana-Champaign
09.50 - 10.10	Understanding Older Adults' Willingness to Adopt a Digital Health Application IN UX	Renato Ferreira Leito Azevedo University of Illinois Urbana-Champaign
10.10 - 10.30	Non-technical skills in firefighting – development, implementation, and evaluation of a team training for enhancing safety critical performance	Vera Hagemann University of Bremen
10.30 - 10.50	The influence of symptom checkers on users' trust and performance	Marvin Kopka Charité – Universitätsmedizin Berlin
10.50 - 11.15	Coffee break	
11.15 - 12.45	Session 10: HIGHLY AUTOMATED VEHICLES 3	<i>Chair:</i> Antonella Toffetti STELLANTIS - CRF
11.15 - 11.35	How am I supposed to know? - Conceptualization and first Evaluation of a Driver Tutoring System for Automated Driving	Norah Neuhuber Human-Centered Systems, Virtual Vehicle Research GmbH
11.35 - 11.55	Sleeping during highly automated driving – target groups and relevant use cases of an in car sleeping function	Markus Tomzig Wuerzburg Institute for Traffic Sciences (WIVW)
11.55 - 12.15	Evaluation of two training protocols for highly automated vehicle	Ebru Dogan VEDECOM
12.15 - 12.35	I also care in manual driving - Influence of type, position and quantity of oncoming vehicles on manual driving behaviour on rural roads	Patrick Roßner Chemnitz University of Technology
12.35 - 12.50	BEST POSTER AWARD EARLY CAREER BEST PAPER AWARD CONFERENCE CLOSING	Karel Brookhuis Thomas Franke Antonella Toffetti Stephen Fairclough
12.50 - 14.00	Lunch	
14.30 - 18.30	GUIDED VISIT TO "PINACOTECA GIANNI E MARELLA AGNELLI" The visit will be done in groups of 25 people. Please, go to the desk to register for the visit	



Wednesday 20 - Friday 22 April

No	POSTERS	AUTHOR	AFFILIATION
1	Patterns of risk-taking behaviours among motorcyclists at signalized intersections in Taiwan	Anja K. Huemer (Mark Vollrath)	Technische Universität Braunschweig
2	Can autonomous agents lead to human-autonomy teaming? – A view into the field and implications for research and practice	Michèle Rieth	University of Bremen
3	Cookie Banners and Trust: UX design for privacy policy and trust	Veronica Hoth	Technische Universität Berlin
4	Risky decision making due to goal conflicts in firefighting – debriefing as a countermeasure to enhance safety behaviour	Vera Hagemann	University of Bremen
5	Supervising Highly Automated Shuttles: A Case Study of On-Board Operators' Workplaces across Three Real-World Laboratories	Andreas Schrank	German Aerospace Center (DLR)
6	Deep learning for human posture classification in safety critical areas	Thomas E. F. Witte	Fraunhofer Institute for Communication, Information Processing and Ergonomics FKIE
7	Ready, set, go! Sequence models to identify (start-)trigger and interaction points during collaboration tasks with care robots	Kim Klüber	Humboldt-Universität zu Berlin, Institute of Psychology, Engineering Psychology
8	Investigating Pedestrians' Interactions with Automated Buses: How Do External and Dynamic HMIs Affect Trust?	Mele Lau	German Aerospace Center (DLR)
9	Challenging the Perfect Automation Schema - Evidence for Increased Trust in Human Support Agents	Tobias Rieger	Technische Universität Berlin
10			
11	Criteria for the evaluation of interaction behaviour of drivers in a bottleneck scenario	Laura Quante	German Aerospace Center (DLR), Institute of Transportation Systems
12	One design fits all? Evaluating highly automated vehicles' communication strategies for different vehicle types and pedestrian age groups	Michael Oehl	German Aerospace Center (DLR)



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13	Human variability and vulnerability in disaster risk reduction	Gabriella Duca	Institute for Sustainable Society and Innovation
14	Providing contextual information about ADAS limitations in real-time through a driver-vehicle interface	Daban Rizgary	RISE Research institutes of Sweden
15	Towards a Generalized Scale to Measure Situational Trust in AI Systems	Philipp Wintersberger	Visual Computing and Human-centred Technology, TU Wien
16	Driver behaviour around unpredictable cyclists	Arjan Stuiver	Traffic Psychology, University of Groningen
17	An Eye Tracker Study on Cognitive Ergonomics in Human-Robot Collaboration	Tommaso Panchetti	University of Bologna
18	How media reports influence drivers' perception of safety and trust in automated vehicles in urban traffic	Mirjam Lanzer	Department of Human Factors, Ulm University
19	Characterization of action optimality criteria as a function of task difficulty and its sensitivity to workload	Kelly Steiner	Information Processing and Systems Department, ONERA/ ISIR
20	Understanding the link of affinity for technology interaction and working demands and resources	Matthias Hartwig	The Federal Institute for Occupational Safety and Health (BAuA), Germany
21	A Taxonomy to Describe Task Allocation Processes in Human-Autonomy Teaming	Alina Tausch	Ruhr University Bochum
22	To trust or not to trust – Comparing two trust in automation scales when assessing an external HMI in automated vehicles	Ann-Christin Hensch	Chemnitz University of Technology
23	Handling the challenges of analysing complex data scenarios - A case study for translating a prediction model for driving manoeuvres into reusable code and results	Matthias Graichen	
24	Criteria Catalogue for Human-AI Teaming Workplaces	Sophie Berretta	Ruhr-Universität Bochum
25	Ten Criteria for Drawing Informed Inferences from Studies on Non-Driving Related Tasks in Automated Driving	Elisabeth Shi	Technical University of Munich Germany Federal Highway Research Institute (BAST)
26	The times they are changin' - A cognitive task analysis describing the change of the driver's role in different levels of automated driving	Cyril Marx	Human Factors Department, Virtual Vehicle Research GmbH
27	The effect of time pressure on user experience on-board an AV on public roads	Franck Techer	VEDECOM



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No	POSTERS	AUTHOR	AFFILIATION
28	Mid-air haptic feedback: (re-) exploration of air vortex rings as an alternative to ultrasound feedback systems	Philipp Hein	Chemnitz University of Technology
29	Self-triage capabilities of laypersons: Implications for use cases of decision support systems	Marvin Kopka	Charité – Universitätsmedizin Berlin
30	Design for non-compliant users	Dorothee Weichel	Helbling Technik Bern AG
31	Model for Ergonomic Risk Assessment of Older Workers through Wearable Technologies	Alberto Ferreras-Remesal	Instituto de Biomecnica de Valencia
32	Assessment of riding pleasure on electric bicycles	Annika Laqua	Robert Bosch GmbH/Helmut-Schmidt-University Hamburg
33	Psychological Fatigue Indicators implementation in Airline Fatigue Risk Management Systems	Dimitrios Ziakkas	Purdue University
34	How emotions influence conflict detection of Air traffic controllers	Paola Melani	Centre de Recherche de l'Ecole de l'Air, France
35	Safety and Human Factors implications of RPAS introduction in controlled airspace: a case study	Vittorio Sangermano	Institute for Sustainable Society and Innovation
36	Agricultural safety in Human-tractor interaction: novices and experts evaluation of usability and attitudes toward the adoption of a new Foldable ROPS supporting device	Lucia Vigoroso	Institute of Sciences and Technologies for Sustainable Energy and Mobility (STEMS) – CNR
37	Usability and Acceptance of Lower-Back Support Occupational Exoskeletons: The XSPINE project	Gabriele Puzzo	University of Bologna
38	Dynamic replanning assisted by intelligent system: from observed behaviour to operator's intent	Adrien Metge	Onera - The French Aerospace Lab
39	Evaluating contactless user guidance techniques interactions for fingerprint scanners - A usability study	Anne Goy (Marty Friedrich)	Chemnitz University of Technology
40	Yes, I can: Refresher intervention for nonroutine situations in highly automated work environments	Marina Klostermann	Ruhr University Bochum
41	Effect of task difficulty on dismounted soldiers' subjective cognitive load	Alexis Remigereaur	French Armed Forces Biomedical Research Institute (IRBA)
42	An on-road investigation of driving behaviour of drivers with and without ADHD	Assaf Botzer	Ariel University



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