



Chartered Institute
of Ergonomics
& Human Factors

28-30 April, Burton upon Trent, UK

Ergonomics & Human Factors **2025**

Enhancing human performance

Provisional
Programme



Rooms

Session 1: The Sir Bobby Robson Ballroom

Session 2: The Executive Drum

Session 3: St George's Suite Room 1

Session 4: St George's Suite Room 2

Session 5: The Ron Greenwood Suite



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#ehf2025
#ehfcareers

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LOOK

for the topics that interest you by checking the sector or domain indicators for each presentation.

Sector key

Construction	Construction
Medical devices	Defence
Healthcare	Aviation
Rail	Utilities
Transport	Manufacturing
Nuclear	Agriculture
Maritime	Emergency Services
Energy	Cross-sector

Domain key











AI	AI
HF methods & tools	Fatigue
Incident Investigation	HF integration
Work design	Interactions
Technology	Behaviour



























Sector Domain
Session Room 1

13:35 Institute Lecture: Human Performance in Extreme Environments: Insights from Astronaut Training, Susan Charlesworth, Astronaut Instructor

14:35 Just-a-minute poster session















-  Developing heuristics for in-vehicle ambient intelligence, [Catherine Harvey, University of Nottingham](#) [11]
-  Evolution of biomechanical methods in ergonomic analyses, [James Shippen, BoB Biomechanics](#) [17]
-  Predicting compliance behaviour during a flood disaster using the talk-through method, [Razan Yaseen Aldahlawi, University of Nottingham](#) [22]
-  Highlighting barriers to the use of voice-systems in cars: An interview study, [Spash Khandeparker, University of Nottingham](#) [25]
-  Introducing CoolSticks for anaesthesia; a human factors approach, [Joseph Swani, Worcestershire Acute Hospitals NHS Trust](#) [34]
-  Self-assessing visual attention while driving: Implications for driver monitoring systems, [Max Harding, University of Nottingham](#) [42]
-  Working at height assessment: Learning from experience on military vehicles, [Elaine McDonald, QinetiQ](#) [48]
-  Impact of aircraft synoptic page designs on pilot flight performance, [Kübra Bager, Turkish Aerospace](#) [54]
-  Developing healthcare safety investigator competencies for a consensus study, [Sophie Hide, Health Services Safety Investigations Body](#) [60]
-  Impact of a passive exoskeleton on human performance, [Gonny Hoekstra, Technical University Delft](#) [78]
-  Water quality investigations and root cause analysis: A human factors approach, [Jodie Dix & James Cree, IHF Ltd](#) [85]
-  Using design with intent to encourage active travel in MaaS, [Joy McKay, University of Southampton](#) [87]
-  Building a national, systemic network to advance quality and patient safety research, [Jill Poots, Trinity College Dublin](#) [94]
-  Augmented reality in earthquake rescue: Impact on workload and decision making, [Weixuan Li, University of Nottingham](#) [99]
-  Using wearable sensor technology to improve learning transfer in manual handling training, [Victoria Forrester, University of Derby](#) [106]
-  FRAM: A boundary object to understand management of paediatric leukaemia patients, [Nicholas Seaton, University Hospitals Bristol & Weston NHS FT](#) [120]
-  Utilising principles of visual hierarchy to reduce errors of accidental drug administration, [Amol Lotlikar, University College London Hospital](#) [140]
-  HF in runway collision: Lesson learned from Flight 2213 accident using HFACS, [Mamadou Toure, Cranfield University](#) [145]
-  On the use of ergonomic standards in Finnish manufacturing SMEs, [Arto Reiman, University of Oulu](#) [147]

Monday afternoon

	Sector	Domain	Session Room 1 Chair:	Sector	Domain	Session Room 2 Chair:	Sector	Domain	Session Room 3 Chair:	Sector	Domain	Session Room 4 Chair:	Sector	Domain	Session Room 5 Chair:
15:35			What can the Post Office 'Horizon' scandal teach about Artificial Intelligence deployment? Chris Baber, University of Birmingham [8]			Human-centred assessment of human augmentation technologies Victoria Cutler, QinetiQ [52]			Systems thinking for sustainability: Using ActorMaps to compare transport schemes Rich McIlroy, University of Southampton [14]			The RAMP Package 2.0 for sustainable musculoskeletal disorder risk management Linda Rose, KTH Royal Institute of Technology [115]			Doctoral Consortium
16:00			Developing human factors guidance for introducing Artificial Intelligence into the energy sector Robert Becker, User Centric Design [51]			Generation after Next HMI in defence: What might the future look like? Vicky Steane, Thales [71]			Impact of neck support on headrests for enhancing relaxation and comfort Mohsen Zare, UTBM [132]			Design and evaluation of an ergonomics risk assessment report using sensor-based data Liyun Yang, Karolinska Institutet [117]			
16:25 (ends 16:50)			Human-AI decision-making in higher education Robert Houghton, University of Nottingham [103]						Design and validation of a vehicle-integrated motion sickness mitigation system William Emond, UTBM [151]			From data to decision: A case study on ergonomics in manufacturing automation Teemu Suokko, MSK Group [148]			

Tuesday morning

Break @ 10:00 

	Sector	Session Room 1 Chair:	Sector	Domain	Session Room 2 Chair:	Sector	Domain	Session Room 3 Chair:	Sector	Domain	Session Room 4 Chair:	Sector	Domain	Session Room 5 Chair:
09:10		<p>Medical devices & combination products track</p> <p>Sponsored by</p> 			<p>HAIQU - A human factors requirements app for human-AI teams in aviation Barry Kirwan, EUROCONTROL [35]</p>			<p>Understanding human factors in construction Shelley Stiles, Gateway Consultants (HSW) Ltd</p>			<p>Climate change and climate action in Welsh agriculture Henry Amery, Cardiff University [121]</p>			<p>Masterclass 3: Accimap led by Paul Salmon, University of the Sunshine Coast</p>
09:35 (ends 10:00)		<p>Welcome Keynote</p>			<p>Can AI recognise pilot's vocal emotional expression under emergency situations? Wen-Chin Li, Cranfield University [139]</p>			<p>Adaptive safety on the construction frontline Clinton Horn, Loughborough University [50]</p>			<p>Operational strategies within simulated environments Mohsen Zare, UTBM [131]</p>			

Tuesday morning

Break @ 11:35



		Session Room 1	Session Room 2	Session Room 3	Session Room 4	Session Room 5					
Sector	Topic	Chair:	Sector	Domain	Chair:	Sector	Domain	Chair:			
10:20	Case studies	Realising market potential: HF and design thinking for novel ophthalmology patient interfaces Tim Phillips, Cambridge Consultants Ltd [157]		Augmenting aviation incident analysis with AI, and the curse of dimensionality Ryan Elliott, London Luton Airport [15]		WRMSD risks within the construction industry Andrew Pinder, HSE [63]		People oriented smart towns Barry Kirby, K Sharp Ltd [38]			Masterclass 3: Accimap
10:45		Use of rapid genetic testing equipment - a human factors case study Rachel Corry, Manchester Foundation Trust & University of Manchester [129]		Maintenance errors in commercial aviation: contextualising an undefined systemic problem Kevin Hayes, Airbus Commercial [43]		Fatigue risk management within the UK construction industry Shelley Stiles, Gateway Consultants (HSW) Ltd [89]		Specific heuristics for smartwatch usability evaluation: Development, validation and comparison Yiyao Li, University of Nottingham [65]			
11:10 (ends 11:35)	 R	Designing for sustainability: a user- and planet-centric approach to developing medical products Pierre-Francois Gauiter, Cambridge Consultants Ltd [162]		An electric aircraft accident case study – human factors analysis and lesson learned Michael Bromfield, University of Birmingham [79]		Adopting passive exoskeletons: Worker perspectives and impact on work productivity and quality Marcus Yung, Canadian Institute for Safety, Wellness & Performance [98]					



Session Room 1

12:00

Keynote: Hope Powell, Women's Technical Director at Birmingham City Football Club, in a fireside chat with Professor Paul Salmon, University of the Sunshine Coast

Tuesday afternoon


















Break @ 15:15



	Sector	Topic	Session Room 1 Chair:	Sector	Domain	Session Room 2 Chair:	Sector	Domain	Session Room 3 Chair:	Sector	Domain	Session Room 4 Chair:	Sector	Domain	Session Room 5 Chair:
14:00		Innovation	Deploying usability research within low-to-middle income countries Alejandra Anderson, Crux Product Design [161]			Understanding the effect of team familiarity on shared spatial situational awareness Vicky Veal, Cranfield University [29]			Allocation of Function: Yes, no, maybe? Adrian Wheatley, Assystem [20]			Understanding work-as-planned and work-as-done in biomedical laboratories Viji Vijayan, Praxis Biorisk Systems Pte Ltd [59]			Masterclass 4: Physical ergonomics led by Matthew Birtles, HSE
14:25			Usability of drug delivery devices: Current challenges and innovative methods Cornelia Kratzer, Design Science [163]			Human performance optimisation interventions in air traffic control Katie Fisher, NATS [45]			Attention capture experimental paradigm for cross-screen interaction in nuclear power monitoring system Xiaoli Wu, Nanjing University of Science & Technology [40]			Prospective cohort study on paramedic fatigue: Impact of workload and shift schedule Amin Yazdani, Canadian Institute for Safety, Wellness & Performance [96]			
14:50 (ends 15:15)			It depends – on what? Let's discuss context of use Natalie Shortt, Kinneir Dufort [155]						Day in the Life of: Applying the process to the nuclear industry Rachel Selfe, AtkinsRéalis [68]			Improving ineffective instructions Andrew Brazier, AB Risk Ltd [56]			

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Tuesday afternoon

	Sector Topic	Session Room 1 Chair:	Sector Domain	Session Room 2 Chair:	Sector Domain	Session Room 3 Chair:	Sector Domain	Session Room 4 Chair:	Sector Domain	Session Room 5 Chair:
15:45	Looking forward	Panel session Human factors approach to platform device development Finola Austin, Owen Mumford Ltd [159]	 	Workload and perceived usefulness when an electronic checklist with sound is used Florin Dumitrascu, Cranfield University [113]	 	Human factors & AI in nuclear: Consensus regulations as a trust bucket Gorby Jandu, Assystem UK [88]	 	Exploring the perception, challenges and benefits of cabin crew peer support programmes Jordan Hazrati, Coventry University [16]		Masterclass 4: Physical ergonomics
16:10		Going beyond the minimum: Practical strategies and collaborative opportunities Reece Knight, Root Cause Insights Ltd [153]	 	Anatomy of a deep dive into airport taxiway selection David Newman, NATS [13]	 	Testing requirements to optimise human performance Chris Heath, RPS Group [122]	 	Gender in human factors education: A pilot study Rich McIlroy, University of Southampton [62]		
16:35 (ends 17:00)		Discussion	 	Resident pathogens in systems engineering: Boeing 737 Max 8 crashes case study Sanjeev Kumar Appicharla [146]			 	Inter-organisation collaboration in gas distribution: A pathway to more consistent operations? Harvey McIntosh, SGN & Nikki Legg, Cadent Gas [128]		

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Wednesday morning































Lunch @ 12:35



	Sector	Domain	Session Room 1 Chair:	Sector	Domain	Session Room 2 Chair:	Sector	Domain	Session Room 3 Chair:	Sector	Domain	Session Room 4 Chair:	Sector	Domain	Session Room 5 Chair:
10:45			Developing an evidence-based safety performance framework for telephone triage Jill Poots, Trinity College Dublin [49]			Integration of human factors in railway systems lifecycle processes Nora Balfe, Iarnrod Eireann Irish Rail [72]			Workplace workshop			Masterclass 5: Getting human-AI partnerships right			Masterclass 6: Learning review
11:10			Evaluation of patient alerts within an electronic medical records program Camilla Rowland, University Hospitals Bristol & Weston NHS Trust [82]			Collaboratively integrating inclusive design into very high-speed rolling stock development Aoife Finneran, Alstom [74]									
11:35 (ends 12:35)	Broadbent Lecture: Managing occupational road risk: Are we there yet? Professor Nicola Christie, UCL														

Wednesday afternoon

Break @ 14:50 

	Sector	Domain	Session Room 1 Chair:	Sector	Domain	Session Room 2 Chair:	Sector	Domain	Session Room 3 Chair:	Sector	Domain	Session Room 4 Chair:	Sector	Domain	Session Room 5 Chair:
13:35			Towards enhancing human performance in Mako-assisted hip replacement surgeries Jasper Vermeulen, Australian Cobotics Centre [66]			Understanding work-as-done in fatigue risk management: Lessons learned Anisha Tailor, Rail Safety & Standards Board [23]			Reimagining Rasmussen's risk management framework: A contemporary view on risk Paul Salmon, University of the Sunshine Coast [58]			The age factor in ride comfort: Comparing younger and older passengers' perspectives Anna-Lisa Osvalder, Chalmers University [80]			Carers perspectives of usability of standing assistive devices Chia-Jung Kang, University of Nottingham [6]
14:00			Working alone, saving lives: a focus on transfusion laboratory safety Nicola Swarbrick, SHOT Serious Hazards of Transfusion [73]			Verification and application of workwear-integrated sensors for ergonomic injury risk assessment Arun Nandakumar, Imperial College School of Medicine [64]			On using Accimaps to support judgements of potential system failure Mike Tainsh, BAE Systems [2]			Enhancing inclusivity and safety in self-driving taxis Clare Mutzenich, Lacuna Agency [105]			Assessing system safety risks in aircraft landing Ahmed Jilaau, Cranfield University [114]
14:25			Ensuring UK medical graduates meet the GMC's outcomes relating to human factors Helen Vosper, University of Aberdeen [116]			Do rail workers still have a 'feast-and-famine' sleep pattern post-Covid? Anna Vereker, RSSB [81]			Integration of personas in transport policymaking Phuong Anh Nguyen, University of Nottingham [118]			Using co-simulation to explore distributed situation awareness in AV remote operation Hannah Parr, University of Nottingham [24]			Assessing the effectiveness of virtual reality tasks as stress-inducing environments Marcus Baldo, University of Sao Paulo [55]

Wednesday afternoon

Session Room 1

15:05 Discussion session

16:20
(ends
16:30) Closing address