



Chartered Institute
of Ergonomics
& Human Factors

28-30 April, Burton upon Trent, UK

Ergonomics & Human Factors **2025**

Enhancing human performance

Programme



Hello!

Welcome to EHF2025! We're delighted that you can join us at St George's Park, a great venue for our theme of 'Enhancing Human Performance'. As the co-Chairs of the Programme Committee, we've very much enjoyed reading all the paper submissions and we look forward to a packed programme of lectures and keynotes presentations, talks from academia and industry, discussions, panel sessions and posters.

As ever we have strong contributions from the UK of course, but we're also reaching far and wide. The papers have been generated by 211 different authors representing 22 countries across all five continents, from as far apart as Finland, Brazil, China and New Zealand!

The mixed format this year with Masterclasses featuring throughout the conference is new, as is our Medical Devices track. There's plenty of opportunity for seeking out friends and making new connections during our Monday evening entertainment and the drinks reception and Annual Dinner on Tuesday. We'd love to hear what you think about it all.

We look forward to catching up with you during the event.



Nora Balfe



Becky Charles

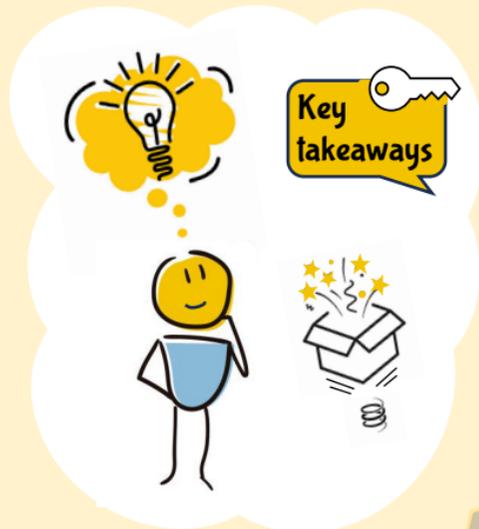


Dave Golightly



Share your insights

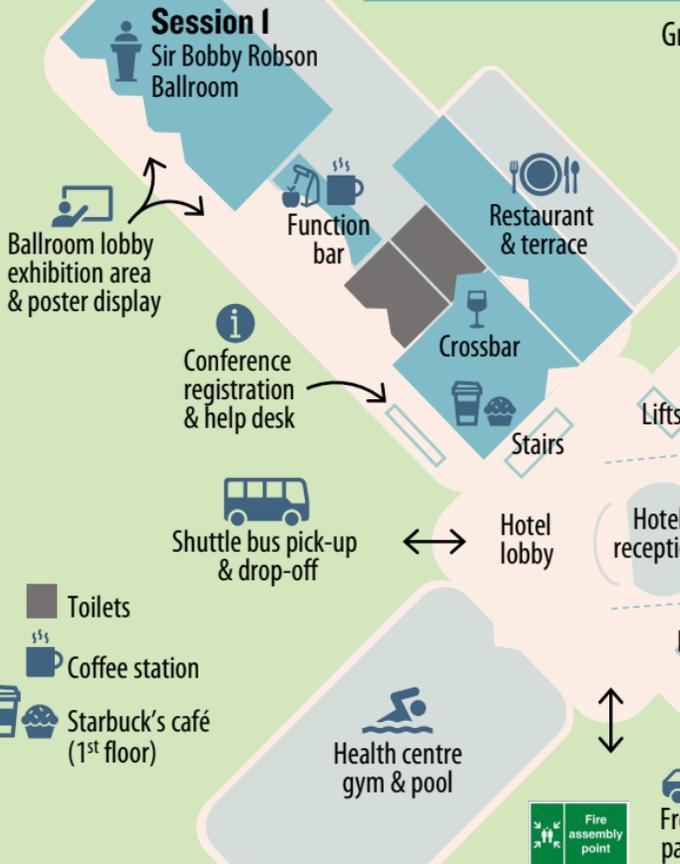
If you've gathered any key takeaways, had some pleasant surprises or experienced a light-bulb moment, come and share it on the board by the registration desk.



Finding your way around



Ground floor plan



Stairs
Bedrooms (ground & 1st floor)

Session 2
Executive Drum (1st floor)

Car parks

Courtyard

Lift
Stairs

Session 3
St George's Suite 1

Session 4
St George's Suite 2

Session 5
Ron Greenwood Suite

Lifts
Bedrooms (1st floor)

Stairs

Conference office
Sir Trevor Brooking Room

Stairs

Free wifi
Network: hhonors
No password

HELP

is at hand from the team.

Got a question or need help? Come and see us on the registration desk. Or ask any member of the CIEHF team or Secretariat wearing these distinctive polo shirts!

We're here to answer your questions about the conference, to help with any membership queries and more generally, to enable you to make the most of your time here!



ELLIE



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AMANDA



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LOOK

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

Sector key

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

Domain key

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



Session Room I



09:30 Opening statements by Chief Executive, **Ben Peachey** followed by Welcome Address by the President of CIEHF, **Martin Thody**

	Sector Domain	Session 1 Chair: Becky Charles	Sector Domain	Session 2 Chair: Fiona Cayzer	Sector Domain	Session 3	Sector	Session 4	Sector Domain	Session 5
10:00		Function allocation for responsible Artificial Intelligence: How do we allocate responsibility? Patrick Waterson, Loughborough University [84]		X-ing the gap Barry Kirby, K Sharp Ltd [37]		Masterclass 1: Fatigue risk management led by Sarah Booth, Baines Simmons		Doctoral Consortium. For invited PhD students to present, share and discuss research ideas and plans with peers. Facilitators: Ella-Mae Hubbard & Gary Burnett, Loughborough University		Masterclass 2: Eye tracking & physiological measures led by Richard Lilley & Andy Shaw, Tracksys
10:25 (ends 10:50)		How well can generative AI design and evaluate user interfaces? Chris Baber, University of Birmingham [9]		Generation after Next HMI in defence: What might the future look like? Vicky Steane, Thales [71]						



Session Room I

Chair: Martin Thody



13:35

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

14:35

Just-a-minute poster session

No	Sector	Domain	
1			Predicting compliance behaviour during a flood disaster using the talk-through method Razan Yaseen Aldahlawi, University of Nottingham [22]
2			Impact of aircraft synoptic page designs on pilot flight performance Kübra Bager, Turkish Aerospace [54]
3			Water quality investigations and root cause analysis: A human factors approach Jodie Dix & James Cree, IHF Ltd [85]
4			Using wearable sensor technology to improve learning transfer in manual handling training Victoria Forrester, University of Derby [106]
5			Self-assessing visual attention while driving: Implications for driver monitoring systems Max Harding, University of Nottingham [42]
6			Developing preliminary heuristics for in-vehicle ambient intelligence systems Catherine Harvey, University of Nottingham [11]
7			Developing healthcare safety investigator competencies for a consensus study, Sophie Hide, Health Services Safety Investigations Body [60]
8			Impact of a passive exoskeleton on human performance Gonny Hoekstra, Technical University Delft [78]
9			Highlighting barriers to the use of voice-systems in cars: An interview study Sparsh Khandeparker, University of Nottingham [25]
10			Augmented reality in earthquake rescue: Impact on workload and decision making Weixuan Li, University of Nottingham [99]
11			Utilising principles of visual hierarchy to reduce errors of accidental drug administration Amol Lotlikar, University College London Hospital [140]
12			Working at height assessment: Learning from experience on military vehicles Elaine McDonald, QinetiQ [48]
13			Using design with intent to encourage active travel in MaaS Joy McKay, University of Southampton [87]
14			Building a national, systemic network to advance quality and patient safety research Jill Poots, Trinity College Dublin [94]
15			On the use of ergonomic standards in Finnish manufacturing SMEs Arto Reiman, University of Oulu [147]
16			FRAM: A boundary object to understand management of paediatric leukaemia patients Nicholas Seaton, University Hospitals Bristol & Weston NHS FT [120]
17			Introducing CoolSticks for anaesthesia; a human factors approach Joseph Swani, Worcestershire Acute Hospitals NHS Trust [34]
18			HF in runway collision: Lesson learned from Flight 2213 accident using HFACS Mamadou Toure, Cranfield University [145]

Monday afternoon

	Sector Domain	Session 1 Chair: Dave Golightly	Sector Domain	Session 2	Sector Domain	Session 3 Chair: Sylvain Posadas	Session 4	Sector Domain	Session 5 Chair: Elaine Skilling
15:35	 	What can the Post Office 'Horizon' scandal teach about Artificial Intelligence deployment? Chris Baber, University of Birmingham [8]	 	Panel discussion: How do we do human factors in the new defence landscape? Chair: Barry Kirby, K Sharp Panellists: Fiona Cayzer, BAE Systems, Ian James, Royal Air Force & Suzy Broadbent, Dstl	 	Impact of neck support on headrests for enhancing relaxation and comfort Mohsen Zare, UTBM [132]		 	The RAMP Package 2.0 for sustainable musculoskeletal disorder risk management Linda Rose, KTH Royal Institute of Technology [115]
16:00		Developing human factors guidance for introducing Artificial Intelligence into the energy sector Robert Becker, User Centric Design [51]				Systems thinking for sustainability: Using ActorMaps to compare transport schemes Rich McIlroy, University of Southampton [14]			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]				Head movements and physiological indicators as predictors of passenger motion sickness Mohsen Zare, UTBM [151]			From data to decision: A case study on ergonomics in manufacturing automation Teemu Suokko, MSK Group [148]

ESSENTIAL

bits & bobs



Walking Football

Sunday 16:00 - 18:00

Pre-booked only to play

Meet at the Conti pitch

Wear moulded studs or grippy trainers

Take water

Spectators welcome



FA Guided Tour

Monday 17:15 - 18:15

Pre-booked only

Meet the tour guide in the hotel lobby



Embodiment sessions

Tuesday & Wednesday 07:15 - 07:45

In the Executive Drum

Wear comfy clothes



Breakfast

In the restaurant

Every day 07:00 - 09:00

Lunch

Buffets served in the ballroom lobby

Seating available in the Crossbar

Dinner

Sunday, Monday in the restaurant

Sunday 3-course, 18:30 - 20:30

Monday BBQ, 18:00 - 19:30

Tuesday formal, 19:30 in the ballroom



Quiet zones

In the hotel lobby

Upstairs on the mezzanine

Outside on the walking trails



Hilton Hotel check in

Check in after 15:00

Group check in on Monday 15:00 - 16:00

Check out by 12:00

Boars Head check in

Check in after 14:00

Breakfast on site, other meals at the Hilton



Shuttle bus departure times

Monday: Hilton to Boars Head 17:00

Boars Head to Hilton 18:00

Hilton to Boars Head 22:00

Tuesday: Boars Head to Hilton 08:30

Hilton to Boars Head 17:10

Boars Head to Hilton 18:15

Hilton to Boars Head 22:30

Wednesday: Boars Head to Hilton 08:30

THANKS

to our sponsors and exhibitors!

EXHIBITOR



Design Science is your human factors partner, dedicated to advancing the cutting edge of medicine, promoting safety in healthcare and collaborating with the foremost life science companies. Our usability engineering firm, with locations in Philadelphia, Chicago and Munich, puts patients and their support teams at the centre of our mission.

EXHIBITOR



Create safer, more productive work environments with Xsens Motion Capture. Conventional ergonomic assessment methods are time-consuming, subjective and often tedious. Xsens Ergonomic solutions enable the identification and prevention of musculoskeletal disorder risks, providing actionable insights to design safer and more productive work environments. Embrace a future focused on employee empowerment and wellbeing.

SPONSOR



A global partner, Rebus Medical exists to improve the lives of patients, healthcare professionals and caregivers around the World. We're a trusted human factors consultancy helping our clients develop safe and effective medical devices. We put human factors at the heart of the medical device design process, and we deliver strategic regulatory compliance in line with key standards.

EXHIBITOR



SpatialCortex is a safety tech company creating wearable sensors and AI-driven analytics to prevent workplace ergonomic injuries, reduce costs, enhance productivity, ensure compliance and protect employee wellbeing.

EXHIBITOR



As a leader in observational research solutions, Mangold International is excited to showcase our latest software products. Designed for research institutions, training centres and universities, our solutions support fields like ergonomics, human-computer interaction, usability, cognitive psychology or other areas of human factors research. Unlock the full potential of your research with Mangold!

EXHIBITOR



Engineering a better future for our planet and its people. Human factors at AtkinsRéalis is about using data and design to make things safer, more efficient and more accessible. Our teams are intrigued and challenged by a broad portfolio of work across a range of industries including transportation, nuclear and power, and aerospace, security, design and technology. Come and visit our stand to learn how you might shape your career at AtkinsRéalis, with the opportunity to be part of landmark projects at the forefront of complex engineering and innovation, across diverse industries, offering expertise in human factors and behavioural science. No matter where you are in your career, at AtkinsRéalis you'll discover inspiring development opportunities, enjoy an inclusive culture of knowledge sharing and innovation, and be supported with bespoke careers mentorship.

EXHIBITOR



Class Professional Publishing provide innovative and accessible learning resources for healthcare professionals. We also produce bespoke digital content, monthly articles, case studies and quizzes. Come and talk to us about your latest idea.

SPONSOR



SYSTRA in the UK leads the delivery of sustainable infrastructure and environments through specialist engineering and consultancy services. A world leader in mobility and mass transit, we deliver planning and development consultancy, engineering design, project management and specialist technical services, that enables the safe and efficient movement of people, goods and essential services.

EXHIBITOR



The Health & Safety Executive have one of the biggest teams of Human Factors Specialists in the country, but we want to get bigger in 2025 to help ensure employers across Great Britain work safely, protecting people and places. As a Human Factors Specialist in HSE, you can utilise your technical HF knowledge and experience to influence not only individual employers but whole industry sectors – you get the reward of making a difference and doing work that actually saves lives. Our HF roles are unique and suit those who appreciate variety and a challenge, whilst enjoying flexibility. We will have members of the HF team from all Divisions within HSE available at the conference, providing an excellent opportunity to learn more about what we do.



	Session 1 Chair: Ian Culverhouse		Session 2 Chair: Kirsty Bettinger		Session 3		Session 4 Chair: Ian James		Session 5 Chair: Emma Wildish	
	Sector Topic		Sector Domain		Sector Domain		Sector Domain		Sector Domain	
09:10	Opener	Medical devices & combination products track Sponsored by REBUS MEDICAL <small>HEALTHCARE HUMANISED</small> Welcome		HAIQU - A human factors requirements app for human-AI teams in aviation Barry Kirwan, EUROCONTROL [35]		Masterclass 3: Accimap led by Paul Salmon, University of the Sunshine Coast		Climate change and climate action in Welsh agriculture Henry Amery, Cardiff University [121]		Construction track Sponsored by SYSTRA Understanding human factors in construction Shelley Stiles, Gateway Consultants (HSW) Ltd
09:30 (ends 10:00)		Keynote: Professor Harold Thimbleby, Swansea University		Can AI recognise pilot's vocal emotional expression under emergency situations? Wen-Chin Li, Cranfield University [139]				Operational strategies within simulated environments Mohsen Zare, UTBM [131]		Adaptive safety on the construction frontline Clinton Horn, Loughborough University [50]



#ciehf



#ehf2025



#ehfcareers

Let's generate some noise on social media!

Post your photos and thoughts. Like and comment on our posts, tag us and we'll do the same for you.



		Session 1		Session 2		Session 3		Session 4		Session 5					
		Sector	Topic	Sector	Domain	Sector	Domain	Sector	Domain	Sector	Domain				
		Chair: Chris White		Chair: Frederic Detaille				Chair: Suzy Broadbent		Chair: Katie Dunlop					
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 Barry Kirwan, EUROCONTROL [15]			Masterclass 3: Accimap (continued)			People oriented smart towns Barry Kirby, K Sharp Ltd [38]			WRMSD risks within the construction industry Andrew Pinder, HSE [63]
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]						Specific heuristics for smartwatch usability evaluation: development, validation and comparison Yiyao Li, Univ of Nottingham [65]			Fatigue risk management within the UK construction industry Shelley Stiles, Gateway Consultants (HSW) Ltd [89]
11:10 (ends 11:35)			Designing for sustainability: a user- and planet-centric approach to developing medical products Pierre-François Gautier, Cambridge Consultants Ltd [162]				An electric aircraft accident case study – human factors analysis and lesson learned Michael Bromfield, University of Birmingham [79]						Human-centred assessment of human augmentation technologies Victoria Cutler, QinetiQ [52]	SYSTRA	



Session Room I

12:00

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



Evening unmissables

Drinks Reception

Conviviality in the ballroom lobby



Awards Ceremony

Recognising excellence in the community



Tuesday @ 18:30

Smart dress (black tie optional)
Sir Bobby Robson Ballroom

Annual Dinner

Fine dining and wine
Please sign up to a table listed on a board by the registration desk by 12:00 on Tuesday.

Monday @ 19:40

Comfywear
Sir Bobby Robson Ballroom

Don't miss this mad team quiz night.
Fun, facts and just a teeny bit of football.

The Magic Sponge

Making everything better



Tuesday afternoon

		Session 1		Session 2		Session 3		Session 4		Session 5	
		Sector	Topic	Sector	Domain	Sector	Domain	Sector	Domain	Sector	Domain
		Chair: Ian Culverhouse		Chair: Toni Flint		Chair: Stirling Tyler		Chair: Clare Pollard			
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]	 	Exploring the perception, challenges and benefits of cabin crew peer support programmes Jordan Hazrati, Coventry University [16]	 	Human factors & AI in nuclear: regulatory consensus as the trust bucket Gorby Jandu, International Ergonomics Association [88]	 	Masterclass 4: Physical ergonomics (continued)
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 Barry Kirwan, EUROCONTROL [13]		Gender in human factors education: A pilot study Rich McIlroy, University of Southampton [62]		Testing human factors requirements to optimise human performance Chris Heath, RPS Group [122]		
16:35 (ends 17:00)				Discussion			Inter-organisation collaboration in gas distribution: A pathway to more consistent operations? Harvey McIntosh, SGN & Nikki Legg, Cadent Gas [128]		The Nuclear Learning Pathway: a new route to human factors capability Sam Cook, CIEHF		



	Sector Domain	Session 1 Chair: Shruthi Narayan	Sector Domain	Session 2 Chair: Tabitha Steel	Sector Domain	Session 3	Sector Domain	Session 4 Chair: Guy Osmond	Sector Domain	Session 5
08:45		Posture sensing of spinal surgeons: Movella/Xsens demonstration								
09:00		Exploring work system factors contributing to nurse drug administration errors Stacey Sadler, Nottingham University Hospitals NHS Trus [111]		Exploring the risk and extent of musculoskeletal disorders in UK heavy rail Kirsten Huysamen, RSSB [47]		Masterclass 5: Getting human-AI partnerships right led by Barry Kirwan, HAIQU		Workplace track Workshop: Pre and post occupancy workplace surveys Nigel Oseland, Workplace Unlimited		Masterclass 6: Learning review led by Paul Davison, PPWD
09:25		Understanding the human factors related to unrecognised oesophageal intubation using SEIPS framework Melody Chen, Te Whatu Ora [137]		Improving users' performance and safety at station pedestrian crossings: a qualitative study Yanna Carli, IRT Railenium [83]						
09:50 (ends 10:15)		Local rationality question tool: understanding why it made sense at the time Louise Roe, Maternity and Newborn Safety Investigations [30]		ECDP ETCS Pathfinder: The value of an in-service review John Gunnell, AtkinsRéalis [133]						



		Sector	Domain	Session 1	Sector	Domain	Session 2	Sector	Domain	Session 3	Sector	Domain	Session 4	Sector	Domain	Session 5
				Chair: Jenny Sutcliffe			Chair: Becky Charles						Chair: Jim Taylor			
10:45				Developing an evidence-based safety performance framework for telephone triage Jill Poots , Trinity College Dublin [49]			Integration of human and organisational factors in railway systems lifecycle processes Nora Balfe , Iarnrod Eireann Irish Rail [72]			Masterclass 5: Getting human-AI partnerships right (continued)			Scientific thinking in workplace practice – what can we learn from research? Kerstin Sailer , UCL			Masterclass 6: Learning review (continued)
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]						Panel discussion: Why are you asking me now (after the event)?			
<p>Session Room I Chair: Martin Thody</p>																
11:35 (ends 12:35)	<p>Broadbent Lecture: Managing occupational road risk: Are we there yet? Professor Nicola Christie, UCL</p>															





	Sector Domain	Session 1 Chair: Glyn Barnett	Sector Domain	Session 2 Chair: Laura Sutton	Sector Domain	Session 3 Chair: Lorraine Braben	Sector Domain	Session 4 Chair: Alan Felstead	Sector Domain	Session 5 Chair: Emily Thorne
13:35		Exploring human performance in Mako-assisted hip replacement surgeries Jasper Vermeulen, Australian Cobotics Centre [66]		Understanding work-as-done: Lessons learned in a case study on fatigue risk management Anisha Taylor, Rail Safety & Standards Board [23]		The age factor in ride comfort: Comparing younger and older passengers' perspectives Anna-Lisa Osvalder, Chalmers University [89]		Reimagining Rasmussen's risk management framework: A contemporary view on risk Paul Salmon, University of the Sunshine Coast [58]		Assessing system safety risks in aircraft landing Ahmed Jilaa, Cranfield University [114]
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]		Enhancing inclusivity and safety in self-driving taxis Gary Burnett, Loughborough University [105]		On using Accimap to support judgements of risk during system development Mike Tainsh, BAE Systems [2]		Assessing the effectiveness of virtual reality tasks as stress-inducing environments Marcus Baldo, University of Sao Paulo [55]
14:25		Ensuring UK medical graduates meet the GMC's outcomes relating to HF Helen Vosper, University of Aberdeen [116]		Do rail workers still have a 'feast-and-famine' sleep pattern post-Covid? Anna Vereker, RSSB [81]		Using co-simulation to explore distributed situation awareness in AV remote operation Hannah Parr, University of Nottingham [24]		Integration of personas in transport policymaking Phuong Anh Nguyen, University of Nottingham [118]		

Wednesday afternoon special sessions

Session Room I

15:05 Discussion session
The Way Ahead for Human Factors
Thought-leaders share their insight and invite your views on how to capitalise on rising interest in our brilliant discipline.

16:20 Closing address
Ben Peachey
Chief Executive, CIEHF



16:30 End of conference. Thanks so much for coming! 



IEA2027



- We're hosting the triennial International Ergonomics Association Congress in summer 2027 in London. With 1800 delegates expected from around the world, it's going to be an amazing event. More details soon!

GREAT

to see you here!

We hope you enjoyed your time with us.

Ergonomics & Human Factors 2026

27-29 April 2026, Nottingham

Will you be there?

