

Chartered Institute
of Ergonomics
& Human Factors



ANNIVERSARY
1949 - 2024

Ergonomics & Human Factors 2024

22-24 April
Kenilworth

Programme

 #ehf2024

Hello!

Welcome to EHF2024! We're delighted that you can join us in Kenilworth for this particularly important year for our Institute as we mark our 75th Anniversary. As the co-Chairs of the Programme Committee, we've thoroughly enjoyed reading all the paper submissions and we look forward to a packed programme of lectures and keynote presentations, talks from academia and industry, discussions, panel sessions and posters. As ever we have strong contributions from our members but there are also many new presenters this year including representatives from early career specialists, demonstrating the health of our discipline. We have keynotes presenting timely themes and a discussion panel on the future of ergonomics and human factors. Monday features a range of Masterclasses, a Doctoral Consortium and our Careers Day. There's also plenty of opportunities for networking and socialising during our Monday evening entertainment and our drinks reception and Annual Dinner on Tuesday.

If you need any assistance, please seek out the Secretariat or a member of the CIEHF Team - just look for the yellow polo shirts! They're all here to help you make the most of the event and we look forward to catching up with you over the next few days.



Nora Balfe



Becky Charles



Dave Golightly



THANKS

to our sponsors!



Finding your way around



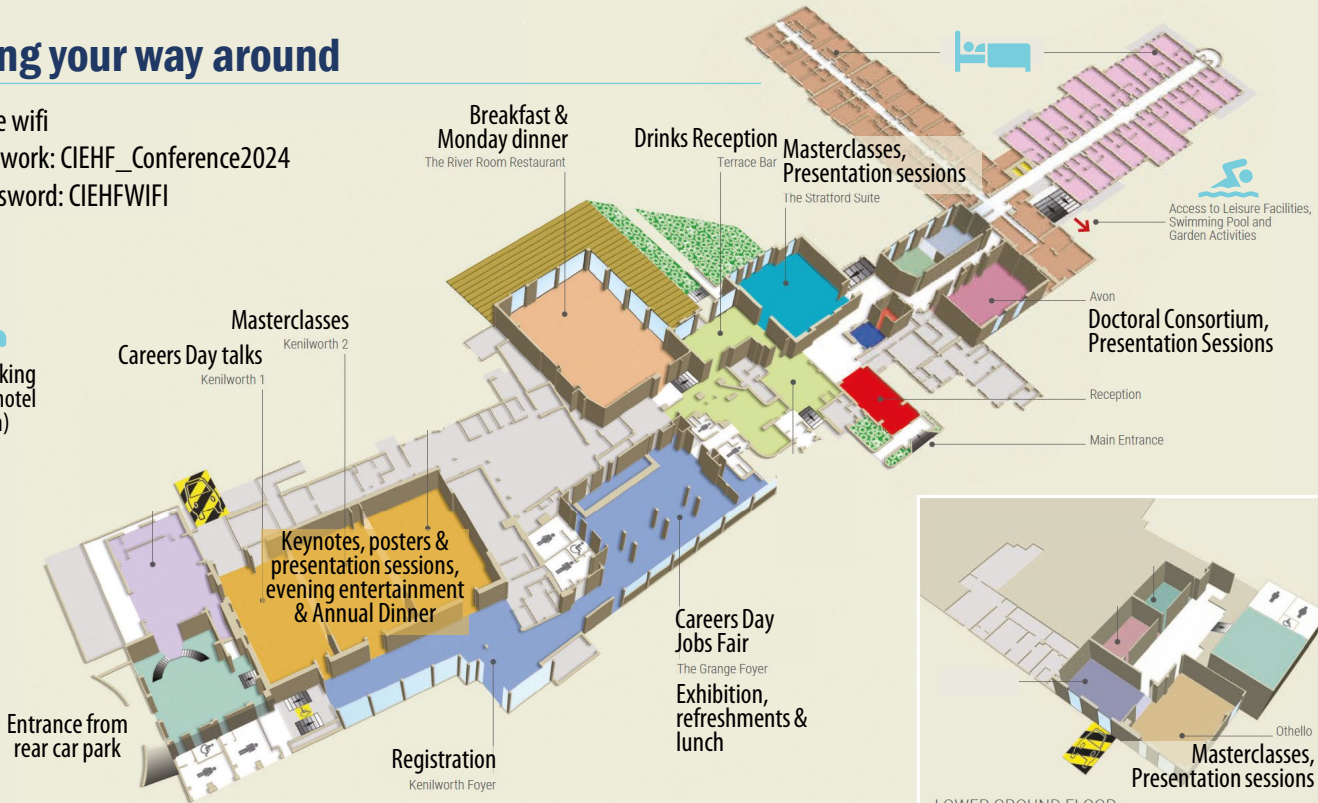
Free wifi
Network: CIEHF_Conference2024
Password: CIEHFWiFi



Free car parking
(register at hotel reception)



Shuttle bus
pick-up &
drop-off



Monday's activities

Lunch @ 13:00 

Masterclasses		Room
10:00	Masterclass 1: Predictive Workload by Harriet Morley, BAE Systems Submarines	Stratford
	Masterclass 2: Safety Culture by Steve Shorrock, EUROCONTROL	Ken'wth 2
	Masterclass 3: Prospective Risk Assessment by Paul Salmon, University of the Sunshine Coast	Othello
13:00	Lunch in the Grange Foyer exhibition hall 	
14:00	Masterclass 4: Qualitative Human Error Analysis led by Steph Simpson, Abbott Risk Consulting	Stratford
	Masterclass 5: Investigations in Healthcare led by Laura Pickup, University Hospitals Bristol & Weston NHS Foundation Trust	Ken'wth 2
(ends 17:00)	Masterclass 6: Making the most of LinkedIn by Kerry Watkins, Social for Good	Othello

Careers Day

10:00 – 16:30

Jobs Fair in the Grange Foyer



NATS

AtkinsRéalis



Talks (30m) in Kenilworth 1

10:30 Automotive
Michael Marshall

11:30 From graduate to industry
Romy Norgrove & Harley Rints

12:30 Design
Lisa Baker

14:00 Nuclear
Alice McDougall

14:45 Consultancy
Robin Ellis

15:30 Defence
Alan Felstead

Doctoral Consortium

10:00 – 16:00, Avon

For PhD students to present, share and discuss research ideas and plans with peers. Facilitators: Ella-Mae Hubbard, Loughborough University & Gary Burnett, University of Nottingham

Tuesday morning openers

Session Room 1
Kenilworth Suite

08:50 Welcome address
Professor Mark Young
CIEHF President



09:00  Institute Lecture: Enhancing cyber security through human factors
Generating practical actions organisations can take to reduce the risk of "human error"
Amanda Widdowson, Thales

09:50 Mini break



 #ciehf
#ehf2024
#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.

LOOK

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

Sector key

 Healthcare

 Rail

 Road

 Maritime

 Energy

 Nuclear

 Defence

 Aviation


 Manufacturing


 Construction

 Cross-sector


Domain key

 HF methods


 Incident Investigation


 Design

 Technology & AI

 Human Performance

 HF integration

 Accessibility

 Behaviour

Tuesday morning presentations








Break @ 11:20



	Sector	Domain	Session Room 1 Chair: Fran Ives	Sector	Domain	Session Room 2 Chair: Becky Charles	Sector	Domain	Session Room 3 Chair: Andy Brazier	Sector	Domain	Session Room 4 Chair: Lisa Fitzsimons
10:00			A vision to 'Design out' accidentally retained surgical items in vaginal childbirth Aditi Desai, Royal Wolverhampton NHS Trust [37]			Understanding the impact of ETCS on driver 'route knowledge' competence Arielle Vriesekoop-Beswick, Systra Scott Lister [43]			Human factors in safety critical design: using haptic feedback for robot teleoperation Teegan Bowker, AtkinsRéalis [93]			The study of risk perception in aircraft maintenance Raphael Chirac, Human Design Group [24]
10:20			Measuring professional wellbeing in healthcare Giulia Miles & Upasana Topiwala, Nottingham University Hospitals NHS Trust [71]			Electrifying the future Irish railway Nora Balfe, Iarnród Éireann Irish Rail [92]			Reflections on a major nuclear new build project from concept to commissioning Emma Ridsdale, RPS [121]			The impacts of systematic false alarms on Air Traffic Controllers' situation Awareness Ousmane Diack, Cranfield University [47]
10:40			Developing a systems-based professional wellbeing tool: What should we consider? Eva-Maria Carman, Nott Univ Hospitals NHS Trust [100]			Exploring effectiveness of driver attention and alertness monitoring devices for GB railway Kirsten Huysamen, RSSB [61]			Human Factors Integration for a nuclear waste management facility – a success story Clare Parker, Risktec Solutions [136]			The Adaptive Organisation: Progress in understanding adaptation in safety management Craig Foster, NATS [49]
11:00 (ends 11:20)			A comprehensive method for evaluating healthcare environments, resilience and wellbeing Simon Gill, The Safeguarding Community & Renaldo Blocker, Mayo Clinic, USA [125]			Why do train drivers pass red signals? Understanding underlying causes of SPADs Tom Hyatt, RSSB [65]			Success factors for human factors issues management in the nuclear industry Samuel Farrar, AtkinsRéalis [111]			Evaluating COOL technique for commercial pilots overcoming startle effect Samarth Burande, Cranfield University [70]

Tuesday morning presentations

Lunch @ 13:10 

	Sector	Domain	Session Room 1 Chair: Tracey Herlihey	Sector	Domain	Session Room 2 Chair: Kimberley Harding	Sector	Domain	Session Room 3 Chair: Huw Gibson	Sector	Domain	Session Room 4 Chair: Enda Fallon
11:50			Cognitive decision-making in patient flow management Matthew Woodward, University of Cambridge [130]			Enabling safety improvement by enhancing psychological safety in workplace conversations Paul Leach, RSSB & Kate Bonsall-Clarke, People Who Thrive [10]			Lessons learnt from introducing a Fatigue Risk Management System Nikki Legg, Birkbeck College [109]			Developing a human-centric de-icing system to increase airport capacity and operational safety Ahmed Yaghi, Bucharest Airports, Romania [38]
12:10			A model for managing the risk of organisational change Lorraine Braben, Lorraine Braben Consulting Ltd [117]			Demonstrated Impact Award 2023 - a new train of thought Paul Davison, PPWD Consulting Ltd [73]			Hoisting: what could possibly go wrong? Adrian Wheatley [27]			How can Neisser's PCM be used to identify information needs in MaaS? Joy McKay, Univ of Southampton [131]
12:30			Case study: branching narrative storytelling to improve construction site safety performance Shelley Stiles, Gateway Consultants (HSW) Ltd [81]			Attitudes to physiological wearables in the workplace in the railway industry Abigail Fowler, University of Nottingham [112]			Human factors' role in supporting best practice Andrew Brazier, AB Risk Ltd [22]			Human-centred policy development for the maritime industry Dhwani Oakley, University of Southampton [126]
12:50 (ends 13:10)			Development of a behavioural markers system for maritime autonomous surface ship operators Kirsty Lynch, Univ of Southampton [72]			Understanding human behaviour and decision-making at level crossings Katie Parnell, University of Southampton [124]			Practising what we preach: the performance shaping factors of human factors practitioners James Blundell, Mimir Human Factors Ltd [48]			Human Factors Integration in Digital Railway Transformation: A Call for Collaboration Niamh Tyson, AtkinsRéalis [128]

Tuesday afternoon special sessions

13:10 Lunch in the Grange Foyer



Session Room 1

Chair: Mark Young, CIEHF President

14:10



Keynote: The real price of Swiss Cheese: has patient safety had its day?

Find out about the evolution of patient safety and our misinterpretation of safety science which has potentially made it harder to deal with the everyday unique situations we face. Our obsession with focusing on what goes wrong, which is actually very rare, often leads to guidance which creates constraint – the last thing we need in a complex system.

Dr Neil Spenceley, Glasgow Children's Hospital



15:00 Just-a-Minute Poster Session

Quickfire talks where our poster presenters get 60 seconds each to persuade you to come and see their work. See the next page for details about the posters.

15:30 Break in the Grange Foyer



Chartered Institute
of Ergonomics
& Human Factors

MEET

the CIEHF team, here to help
and support you

Firstly, welcome! We're all
looking forward to seeing you.

Come and find us on our stand in
the Grange Foyer. We're here to
answer your questions about
careers in human factors, your
membership, what we do as a
professional body and anything
else - and just to say hello! Try
your hand at spin-the-wheel too!

We're always available on the
registration desk too, to answer
your questions about the
conference, to help with any
membership account queries and
more generally, to enable you
make the most of your time here.

BEN



TINA



IRIS



SAM



PAIGE



AMANDA



ELLIE


























COME & SEE

our poster presenters on Tuesday at 15:00 in our quickfire Just-a-Minute session!

	Multimodal detection of an electric aircraft propulsion system failure Lamyea Ahmed, University of Birmingham [83]		Application of human factors framework to improve airport customer experience Edyta Ostrowska, Loughborough University [118]
	Agentive language: its effect on the perception of culpability in investigative interviewing Dominique Bovell, Cranfield University [116]		Developing a human factors/ ergonomics handover observation tool based on SEIPS 3.0 Mahnaz Sharafkhani, St James's Hospital Dublin, Ireland [96]
	Adopting a human factors approach to promoting safety in the Emergency Department Richard Brownhill, NHS England [82]		A snapshot of human factors / ergonomics activities in Irish healthcare Mahnaz Sharafkhani, St James's Hospital Dublin, Ireland [99]
	Upright cancer therapy: a human factors perspective Susmitha Cherukuru Lakshmiopathy, Leo Cancer Care Ltd [40]		The importance of door-to-door journey planning in Mobility as a Service Em Thorogood, University of Southampton [44]
	The real process: human factors engineering design review in the oil & gas industry Charlie Exley, Monaco Engineering Solutions [68]		'Work as' approaches in marine accident investigation: the tale of the Kaami Will Tutton, Marine Accident Investigation Branch [35]
	Exploring gas industry fatigue challenges through the operatives' perspective Jordan Fischer, University of Nottingham [98]		Are you sitting comfortably? A survey into glider pilot comfort Ava Udwardia, Loughborough University [78]
	Tool for rail freight yard complexity and impact on human performance David Golightly, Newcastle University [103]		Practical considerations for sensitive studies during medical device usability assessments Leanne Verwey, Kinneir Dufort [33]
	Knowing and not knowing as system design imperatives Robert Houghton, University of Nottingham [120]		Trends in psychosocial risk exposure in companies affiliated to Mutual de Seguridad-Chile Victoria Villalobos, Universidad de Las Américas, Chile [119]
	Hocus POCUS - Point of Care ultrasound scanning in paediatric haemophilia patients Fran Ives, Health Innovation West Midlands [46]		The information relevance task model of SAP system and information presentation Xiaoli Wu, Nanjing University of Science & Technology, China [54]
	Human factors exploration of occupational health and safety consultancy within SMEs Grainne Kelly, Loughborough University [20]		

Tuesday afternoon presentations

	Sector	Domain	Session Room 1	Sector	Domain	Session Room 2 Chair: Ella-Mae Hubbard	Sector	Domain	Session Room 3 Chair: Lorraine Braben	Sector	Domain	Session Room 4 Chair: Will Tutton
16:00			Workshop: Embedded human factors practitioners in healthcare: What could and should this look like? Eva-Maria Carman & Laura Pickup			Developing instructional decals for self-service Phil Day, NCR Atleos [21]			Circles of Influence: how do you arrange 200 Performance Shaping Factors? Adrian Wheatley [28]			Comparing user interface designs for explainable Artificial Intelligence Chris Baber, University of Birmingham [25]
16:20			A participatory, interactive workshop to discuss what human factors practitioners need to work and gain traction in healthcare. We'll explore topics such as where to start, integration and impact. We want to design together with you the tools we need to support the role and work of human factors practitioners in the NHS.			Applying human factors in whisky manufacture – a project of firsts Anita Weltz, Risktec Solutions [14]			Nuclear: the Big Clean-up Stephanie Simpson, Abbott Risk Consulting Ltd [30]			2B or not 2B? The AI challenge to civil aviation human factors Barry Kirwan, EUROCONTROL [11]
16:40						Integrating usability into rail product development cycle Suganth Rajendra Kumar, INTERGO [89]			Human-centred lighting of a 24-hour control room Martin Redford, AWE [53]			The process of training ChatGPT using HFACS to analyse aviation accident reports Wen-Chin Li, Cranfield University [52]
17:00 (ends 17:20)						Session round-up			Session round-up			How people misinterpret answers from Large Language Models Chris Baber, University of Birmingham [26]

Evening unmissables



Dinner in the River Room Restaurant

Sunday 18:30 - 20:30

Monday 18:00 - 19:30

It's all a big
mystery

(actually, lots of little ones)

Be baffled, befuddled, bewildered and bemused.

All in one night.

Monday 19:30, Kenilworth Suite. Comfywear.



ANNIVERSARY

1949 - 2024

Celebration Dinner

Fine dining and wine

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



Tuesday @ 18:30

Smart dress (black tie optional)

Kenilworth Suite

Drinks Reception

Canapes and conviviality in the Terrace Bar



























Awards Ceremony

Recognising excellence in the community



Wednesday morning presentations

	Sector	Domain	Session Room 1 Chair: Richard McMaster	Sector	Domain	Session Room 2 Chair: Toni Flint	Sector	Domain	Session Room 3 Chair: Ann Mills	Sector	Domain	Session Room 4 Chair: Stirling Tyler
09:00			Understanding the complex challenges in digital pathology and Artificial Intelligence integration Haotian Yi, Loughborough University [57]			'The Golden Bay' Project Gonny Hoekstra, Hoekstra Ergonomics [87]			Development of a strategy to enhance human centred design for aircraft maintenance Simon Gill, The Safeguarding Community & Lisa Fitzsimons, AAIB [122]			Evaluating novel technologies through the notion of affording situations Khawla Aljammaz, University of Birmingham [69]
09:20			Assessment of user needs for a sepsis fluid management Artificial Intelligence tool Kate Preston, University of Strathclyde [74]			Advancing accessible air travel environments for aging Canadians (and beyond) Ben Koskowich & Chantal Trudel, Carleton University, Canada [113]			What does HF Integration really look like? Client/consultant partnership for HS2 Emily Thorne, AtkinsRéalis [129]			Responding to identity theft: a systems analysis of actors, responsibilities, and vulnerabilities Paul Salmon, University of the Sunshine Coast, Australia [58]
09:40			Developing a human factors / ergonomics guide on AI deployment in healthcare Marie Ward, St James's Hospital Dublin [102]			Human factors contributions to Just Culture in aviation and beyond Steven Shorrock, EUROCONTROL [115]			Embedding human factors into high-speed rail systems integration Anthony Coplestone, HS2 [134]			How does explainability affect perceived transparency, trust, acceptance and usefulness? Han Zhang, University of Nottingham [8]
10:00	Mini break											



Wednesday morning keynote

Session Room 1

Chair: Mark Young, CIEHF President

10:10



Donald Broadbent Lecture:
Automated vehicles and other road users: Can they interact nicely without upsetting each other?

How do we create methods that allow automated vehicles to communicate with other road users, and how effective are they?

Professor Natasha Merat
University of Leeds



11:00

Break in the Grange Foyer



VISIT

our exhibitors and see what they have to offer.

All these and more!



Wednesday morning presentations

Lunch @ 12:50



	Sector	Domain	Session Room 1 Chair: Kevin Hayes	Sector	Domain	Session Room 2 Chair: Martin Thody	Sector	Domain	Session Room 3 Chair: Katie Parnell	Sector	Domain	Session Room 4 Chair: Chris Baber
11:30			Applications of human factors to teleconsultations in primary care Aimee Ferguson, University of Strathclyde [55]			Human factors in the trenches Barry Kirby, K Sharp Ltd [29]			A mixed methods study exploring customer perceptions of dynamic hard shoulder roads Annabel Moore, WSP [60]			HFACS-based Bayesian Network: machine learning approach to human factors in hydrogen accidents Edem Tsei, Cranfield University [79]
11:50			Understanding variability in acute hospital care of adults with a learning disability Clare Crowley, Health Services Safety Investigations Body [77]			Supporting distributed sensemaking in command-and-control Huw Gibson, Trimetis [32]			In two minds: distractive and protective effects of passengers in automated vehicles David Large, University of Nottingham [67]			How cognitive task analysis (CTA) can improve learning from serious accidents Ian Pemberton, Human Focus International Ltd [133]
12:10			Human performance metrics in air traffic control Lisa Aldridge, NATS [45]			Introducing IMPACT: design and development of a military orientated cognitive task battery David Thompson, Dstl [105]			'Do Not Disturb While Driving': distractibility of Tesla in-vehicle infotainment system Rachael Wynne, University of Newcastle, Australia [90]			Integration of a causal analysis process into an accident investigation organisation Rebecca Charles, RAIB [137]
12:30 (ends 12:50)			Task complexity and situational awareness in touchscreen interaction on the flight deck Ben Wright, Cranfield University [56]			Validating IMPACT: a new cognitive test battery for defence Erinn Sturgess, Thales UK [64]			Development and validation of a wearable fatigue monitoring device Neil Clark & Melanie Mertesdorf, IHF [123]			How to get richness from H&S data Carlotta Vorbeck & Jodie Lewis, ERM [135]

Wednesday afternoon presentations

Break @ 15:10



	Sector	Domain	Session Room 1 Chair: Melanie Ottewill	Sector	Domain	Session Room 2 Chair: Laird Evans	Sector	Domain	Session Room 3 Chair: Nick Taylor	Sector	Domain	Session Room 4 Chair: Dave Golightly
13:50			Healthcare versus industrial safety – the impact of cognitive distortion Nick Woodier, University of Nottingham [9]			Middle ground: field of view for future helmet mounted displays Siddharth Shyamsundar, BAE Systems [16]			Systems human factors and ergonomics methods: 35-year review. Where to now? Paul Salmon, University of the Sunshine Coast, Australia [88]			Can Mobility as a Service really contribute to transport sustainability and equity? Rich McLroy, University of Southampton [19]
14:10			A human factors approach to developing a learning toolkit for the NHS Tracey Herlihey, NHS England & Jane Carthey, Jane Carthey Consulting [23]			Loss of an F35 fighter jet - the case for human factors integration Kevin Hayes, DAIB [41]			Participatory ergonomics: The design of PRIME road markings for motorcycle casualty reduction Alex Stedmon, Open Road Simulation Ltd [104]			Exploring constraints to rail travel for late adopters of technology Charlotte Lenton, University of Nottingham [97]
14:30			Understanding how work as done of incident investigators supports a Safety-II approach Brook Howells, Loughborough University [80]			Human factors considerations in the development of Extended Reality training systems Victoria Cutler, QinetiQ [31]			Effect of words, numbers and colours on subjective interpretation of rating scales Niall Miranda, Cranfield University [84]			A framework for estimating difficulty, user cost and exclusion from everyday tasks David Nery, University of Cambridge [91]
14:50 (ends 15:10)			Revolution of report writing in safety investigations Jennifer O'Donnell & Nicola Steevenson, Systemic Factors Ltd [114]			Lagging human factors: latency in helmet mounted displays and its implications Siddharth Shyamsundar, BAE Systems [17]			The gender-data gap in e-micromobility research Katie Parnell, University of Southampton [101]			Session round-up

Wednesday afternoon special sessions

Session Room 1

15:20

Discussion session:
The future of human factors

Professors Mark Young & Paul Salmon



2024 marks both our 75th anniversary and the 10th anniversary of being awarded the Royal Charter. There is much to be proud of, but there are many opportunities and challenges we face as we look to the future. In this session, we'll launch CIEHF's new strategic plan and have an open discussion on the human factors profession.

Join Mark (CIEHF President) and Paul (author of a paper on the challenges and future direction for the profession) to share your views on our future.

16:20

Closing address

Ben Peachey
Chief Executive, CIEHF



16:30

End of conference. Thanks so much for coming!



GREAT

to see you here!

We hope you enjoyed your time with us.

Ergonomics & Human Factors 2025

28-30 April 2025, Midlands

Will you be there?