

**SCSC**

For Everyone Working in System Safety

# SSS'26 Programme

## 34<sup>th</sup> Safety-Critical Systems Symposium



**10 - 12 February 2026**  
**The Milner York, UK**

# The Safety-Critical Systems Club

invites all delegates to its 34<sup>th</sup> Annual Symposium

The SCSC has supported the system safety community since 1991

This year's symposium has five main themes of AI and Autonomy, Addressing Complexity, Unmanned Aerial Vehicles and Systems (UAV/UAS) and New Approaches

System safety must evolve to make best use of AI, both in development of systems and assurance of them. Ways to analyse AI and autonomous systems for safety aspects need to be established

Systems are getting ever more complex, interconnected and inter-dependent. New guidance, tools and techniques are needed to manage and assure such systems

The new SCSC **Safety Management and Safety Management Systems Working Group (SMSWG)** aims to develop a 'Handbook for Safety Managers'

Other SCSC WGs have been active, including the **Safer Complex Systems Working Group (SCSWG)** and the **Safe System Architecting Working Group**

# The Safety-Critical Systems Club

## About the Symposium

This is the programme for the 34<sup>th</sup> Safety Critical Systems Symposium (SSS'26) held in February 2026 at The Milner York hotel, York, UK

The Symposium is for all safety practitioners: both early career and experienced delegates are welcome

Six keynote talks from recognised experts

Three parallel streams on the Wednesday

Poster sessions

Double ticket for early-career delegates

A great opportunity to learn and develop new connections and build networks

Full workshop and tutorial programme

Live demonstrations

SSS'26 extends across 3 days, with presentations grouped into key themes

Symposium Banquet

Armchair chats with experts in the world of system safety

Working group updates provided by posters

Tools, Services and Recruitment Exhibition

Full proceedings volume

Mix with experts and learn new ideas that can help with career progression

Technical entertainment

Distinguished after-dinner speaker

Interactive sessions

# The Safety-Critical Systems Club

## Safety-Critical Systems Symposium (SSS'25)

The programme encompasses three days of presentations including keynote talks, submitted papers, posters, workshops, interactive sessions and a vendor exhibition.

### Keynote and Invited Speakers

**Simon Burton**  
University of York

Simon is Chair of Systems Safety at the University of York and Convenor ISO TC22/SC32/WG14 Safety and AI. An experienced engineer, researcher, consultant and manager with a passion for systems engineering and safety assurance. He focusses on assuring the safety of complex, AI-based systems.



**Mikela Chatzimichailidou**  
University College London

Mikela is a full professor at UCL. She is a leading researcher and consulting engineer bringing together experience and expertise from across healthcare, transportation and infrastructure. She works in the fields of systems engineering and integration, safety assurance, complexity management, product design and innovation.



**Phil Koopman**  
Consultant and Carnegie Mellon University

Prof. Philip Koopman is an internationally recognised expert on AV safety who has worked in the area for nearly 30 years. He specialised in software for mission critical systems and embedded system engineering at CMU. He was the originator of the ANSI/UL 4600 standard on AV safety.



## **Odd Ivar Haugen**

DNV



Odd Ivar Haugen works in the Group Research and Development at DNV, focusing on the safety and assurance of complex systems. He has nearly 30 years of experience with maritime control systems, including Dynamic Positioning systems. He was a key author of DNV's Recommended Practice on "Assurance of AI-enabled systems," which addresses safety considerations for these new technologies.

## **Harold Thimbleby** University of Swansea

Professor Harold Thimbleby is a well-known speaker and has over 500 publications in computer science. He is an honorary member of the SCSC, Professor Emeritus of Gresham College and of Swansea University, was a Leverhulme Senior Fellow, and a Royal Society-Wolfson Research Merit Award holder. His main interests are computer law, digital health, and user interface design.



## **Steve Wright** Wright Airborne



Steve is an avionics and aircraft systems researcher and a company director. He has 35 years of experience developing electronics and software for aerial vehicles, and has specialised in development of novel UAV airframes and systems for a variety of customers, government and commercial, military and civil.

## **After Dinner Speaker**

### **Graham Braithwaite** Cranfield University

Graham is the Director, Aerospace and Aviation at Cranfield University. He specialises in human factors, safety management and safety investigations within aviation, rail and marine transport. He works closely with a number of partner airlines, airports, regulators and investigation agencies.



# Tools, Services and Recruitment Exhibition

From the start of the Symposium until Wednesday afternoon there is a tools and services exhibition, featuring display stands and demonstrations. This is well worth investigating at break times and during the evening drinks reception and buffet meal.

## Posters

There is a poster area where presenters and the SCSC Working Group leads will explain their work on a small group basis. The poster boards will be on display from Wednesday evening to the end of the symposium.

## Tutorials

On Wednesday afternoon there are a set of tutorials covering special areas of interest. These are small group sessions providing introductions to particular topics.

## Workshops

Also on the Wednesday afternoon there are a set of workshops covering new topics in a small group setting.

## Photos from SSS'25



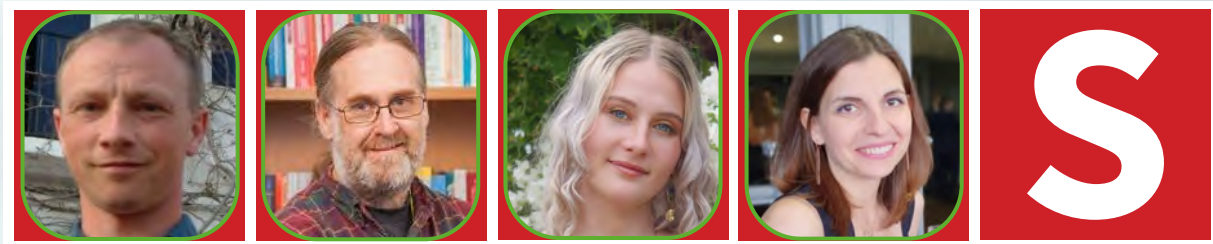
# The Symposium Team



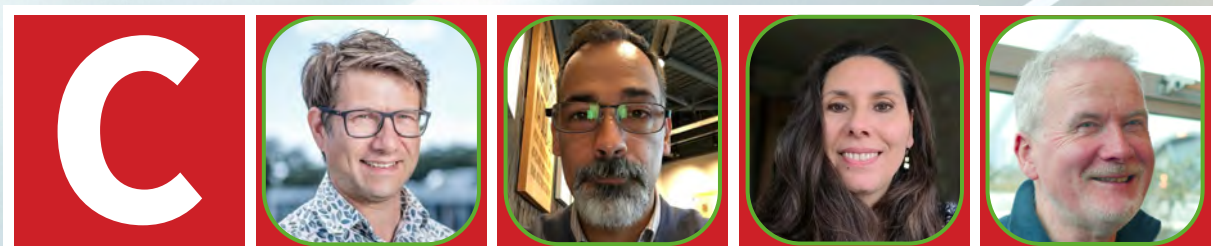
**Brian Jepson   Mike Parsons   Mitali Atkins   Alex King**



**Carmen Carlan   Paul Hampton   Roger Rivett   Stephen Bull**



**Dave Banham   Mark Nicholson   Bella Parsons   Mikela Chatzimichailidou**



**Davy Pissoort   Mark Sujan   Karin Rudolph   Tim Parsons**



# Day 1 - Tuesday 10<sup>th</sup> February 2026: [scsc.uk/sss](http://scsc.uk/sss)

08:30 – Registration with coffee and  
10:20 light breakfast

10:20 – Mike Parsons, SCSC Welcome and Introduction  
10:30

## Session: UAV and UAS

Chair: Mikela Chatzimichailidou

10:30 – **Keynote:** Steve Wright, Staying safe from flying killer robots  
11:05 Wright Airborne

11:05 – Bernhard Kaiser, Rüdiger Agile Model-Based Development and Safety  
11:35 Diefenbach, Matthieu Paquet, Assessment for Light UAVs  
Petr Fomin, Guilherme Goretkin, John Vergere, Tom Neely and John Macauley, Ansys

11:35 – Coffee  
12:05

## Session: Addressing Complexity

Chair: Davy Pissoort

12:05 – Chris Hobbs, Farmhall; Mike Complex Systems Guidance: Learning from  
12:35 Parsons, SCSC Surprises

12:35 – **Lunch with Talk @ 13:05:** Addressing Complexity using STAMP Control  
13:35 Simon Whiteley, Whiteley Structure Models and STPA Hazard Analysis  
Aerospace

13:35 – Jonas Wolf, Hartmut Hörner, Introducing a new complexity metric on  
14:05 Vector Informatik GmbH software unit level

14:05 – James Inge, DE&S, Putting importance into context: moving from  
14:35 Katia Potiron the abstract to the concrete with IEC 63187  
KNDS, Joseph Machrouh, Thales

14:35 – Mikela Chatzimichailidou Armchair chat  
14:55 talking to Karin Rudolph

14:55 – Tea  
15:25

15:25 – James Inge DE&S; Katia Integration of Human Factors into Complex  
15:55 Potiron System Safety  
KNDS; Mark Carter, BAE Systems; Ian Hartwell  
RISIKO

15:55 – **Keynote:** Odd Ivar Haugen, Complexity and Assurance  
16:30 DNV

## Extras

16:30 – Paul Hampton and Karin Technical entertainment with audience  
17:30 Rudolph participation, 'AI Don't Believe It!'

17:45 – Exhibition with drinks and evening buffet meal (free for all delegates)  
20:30 Drinks provided by: 

# Day 2 - Wednesday 11<sup>th</sup> February 2026: [scsc.uk/sss](https://scsc.uk/sss)

<b>Stream A: New Approaches [Events Centre] Chairs: Stephen Bull / Karin Rudolph</b>		<b>Stream B: Workshops [Jorvik Room] Chairs: Mark Nicholson / Roger Rivett</b>		<b>Stream C: Tutorials &amp; YEC [Minister Room] Chairs: Dave Banham / Mark Sujan</b>		<b>Stream D: Social</b>				
08:05 – 08:35		Coffee and light breakfast						08:05 – 08:35		
08:35 – 09:05	<b>Keynote:</b> Mikela Chatzimichailidou, University College London	<b>Balancing Act: Navigating the Tensions Between Safety, Innovation, and Sustainability</b>	-	-	-	-	-	08:35 – 09:05		
09:10 – 09:35	Darendra Appanah, James Cruise, Walden Killick, Bob Oates, Cambridge Consultants	<b>Quantifying the quantised – the interface of quantum technology and safety</b>	Keith Armstrong and Davy Pissoort, KU Leuven	<b>Why EMC testing is not enough, and what to do about it</b>	James Inge, DES, Katia Potiron, KNDS et al.	<b>Developing IEC 63187</b>	-	09:10 – 09:35		
09:40 – 10:10	<b>Keynote:</b> Harold Thimbleby, Swansea University	<b>A framework to update the Common Law presumption that computer evidence is reliable</b>	-	-	-	-	-	09:40 – 10:10		
10:10 – 10:40		Coffee						10:10 – 10:40		
10:40 – 11:00	Phil Koopman talking to Roger Rivett	<b>Armchair chat</b>	-	-	-	-	-	10:40 – 11:00		
11:05 – 11:30	Helen Monkhouse, Michael Orgill, HORIBA MIRA	<b>Automated Driving (AD) Residual Risk</b>	Vikas Ghatge <sup>1,2</sup> , Dries Vanoost <sup>1,2</sup> , Rob Kleihorst <sup>3</sup> , Davy Pissoort <sup>1,2</sup> , 1 KU Leuven, 2 Flanders Make, 3 Philips Medical	<b>Ensuring Safety and Effectiveness of Medical Devices in the Presence of Electromagnetic Disturbances through a Unified EMC Assurance Case: A Risk Pattern</b>	Peter Ladkin, Causalis	<b>Possibility Analysis</b>	-	<b>National Rail Museum Trip 1</b>	11:05 – 11:30	
11:35 – 12:00	Olivier Rouse, EDF Nuclear Services	<b>COTS computer-based devices: Qualification or safety justification needs in the nuclear industry</b>	Divya & Martin Atkins, MCA, Tim Rowe, consultant	<b>How to be Data-Safe</b>		<b>Possibility Analysis - continued</b>	-	<b>NRM Trip 1 - continued</b>	11:35 – 12:00	
12:05 – 12:30	Laure Buisse, Mohammed Tloul, Dries Vanoost, Davy Pissoort, KU Leuven and Flanders Make	<b>Towards Dynamic Safety Cases for Cobots: Leveraging Standards, Indicators, and Digital Twins</b>		<b>How to be Data-Safe - continued</b>	Chris Hobbs, Farmhall	<b>Sensitivity Analysis in a Safety Case</b>	-	<b>NRM Trip 1 - continued</b>	12:05 – 12:30	
12:30 – 13:30		Lunch						<b>NRM Trip 1 - continued</b>	12:30 – 13:30	
13:30 – 13:55	Sam Moody, EDF	<b>Practical experience with the use of static techniques in the substantiation of safety related systems</b>	Jeff Joyce, Adam Casey, Simon Diemert, and Laure Millet, CS Labs	<b>Configurable Assurance Cases</b>	Young and Early-career speakers	<b>5 minute ‘pitch’ talks with £100 Amazon voucher prize</b>	<b>Social Event 1: York Walking Tour</b>	<b>National Rail Museum Trip 2</b>	13:30 – 13:55	
14:00 – 14:25	Gavin McCall, and Joe Melling, Codethink	<b>The Eclipse Trustable Software Framework</b>		<b>Configurable Assurance Cases - continued</b>		<b>5 minute ‘pitch’ talks ... continued</b>	<b>York Walking Tour - continued</b>	<b>NRM Trip 2 - continued</b>	14:00 – 14:25	
14:30 – 14:55	Leo Frietas, UNEW; Colin O’Halloran and Nick Tudor, D-RisQ	<b>Platform: An UK/GE collaboration on formal methods and testing</b>	Robert Stroud, Adelard (part of NCC Group), Sam Moody, EDF Nuclear Services	<b>Experience using static analysis tools to build confidence in safety-critical software for industrial control systems</b>	Jonathan Pallant, Ferrous Systems	<b>Building safety-critical systems in Rust</b>	<b>York Walking Tour - continued</b>	<b>NRM Trip 2 - continued</b>	14:30 – 14:55	
15:00 – 15:25	Carmen Carlan, TÜV SÜD Rail GmbH	<b>Towards Implementing Safety Factories to Enable Agile and Continuous Delivery of Safety-critical Systems</b>		<b>Experience using static analysis tools ... continued</b>		<b>Building safety-critical systems ... continued</b>	<b>York Walking Tour - continued</b>	<b>NRM Trip 2 - continued</b>	15:00 – 15:25	
15:25 – 15:55		Tea						<b>Social Event 2: York Ghost Tour</b>	<b>National Rail Museum Trip 3</b>	15:25 – 15:55
16:00 – 16:30	Carmen Carlan, TÜV SÜD Rail GmbH, Mark Sujan, University of York	<b>Large Language Models in Safety-Critical Domains: Qualification, Assurance and Practical Limits</b>	Joe Hare, Leo Freitas, Ken Pierce, Patrick Degenaar, Newcastle University; Callum Robinson, D-RisQ	<b>Modelling the Requirements of a Medical Device in Kapture and Simulink</b>	Jeff Joyce, Adam Casey, Simon Diemert, Laure Millet, Critical Systems Labs	<b>Operationalizing Metamorphic Testing for Validation of Complex Safety-critical Functions</b>	<b>York Ghost Tour - continued</b>	<b>NRM Trip 3 - continued</b>	16:00 – 16:30	
16:30 – 17:00		<b>Large Language Models ... continued</b>		<b>Modelling the Requirements ... continued</b>		<b>Operationalizing Metamorphic... continued</b>	<b>York Ghost Tour - continued</b>	<b>NRM Trip 3 - continued</b>	16:30 – 17:00	
17:00 – 18:00		<b>Poster session with £100 Amazon voucher prize</b>							17:00 - 18:00	
19:00 – 23:00		<b>Pre-dinner drinks followed by Banquet. After-dinner speaker Graham Braithwaite introduced by Tom Anderson. Post-banquet activity: Quiz</b>							19:00 – 21:30	

## Day 3 - Thursday 12<sup>th</sup> February 2026: [scsc.uk/sss](http://scsc.uk/sss)

08:00 – Coffee and light breakfast  
08:30

### Session: AI & Autonomy 1

Chair: Karin Rudolph

08:30 – 09:05	<b>Keynote:</b> Simon Burton, Jie Zou, Sepeedeh Shahbeigi Roudposhti, University of York	<b>Effective and reflective assurance for AI-based autonomy</b>
09:05 – 09:35	Abigail M. Post, David D. Woods, Martijn IJtsma, The Ohio State University	<b>An Updatable Process to Assess Human Interaction with Artificial Intelligence and Advanced Automation Over Time</b>
09:35 – 09:55	Tim Kelly talking to Tom Anderson	<b>Armchair chat</b>
09:55 – 10:25	<b>Coffee and Posters</b>	
10:25 – 10:55	Meaghan O'Neil, Russell Lock, Loughborough University; Patrick Baker, UK Ministry of Defence; Tim Watson, Loughborough University & Alan Turing Institute;	<b>Preliminary Findings of Practitioner's Perspectives on AI Adoption in Engineering Processes: An Exploratory Study in Engineering Practices</b>
10:55 – 11:25	Oscar Slotosch, Validas AG	<b>An AI-Based Tool Chain Vision for the Development of Safety Critical and Compliant Systems</b>
11:25 – 11:55	Ben Fulford, Thomas Wilkinson, Matt Wylie, Luke Hankins, BMT	<b>AI-assisted HAZOP: Can prompt engineering deliver a credible HAZOP assessment?</b>
11:55 – 12:55	<b>Lunch</b>	

### Session: AI & Autonomy 2

Chair: Carmen Carlan

12:55 – 13:25	Anne Seldon, Consultant	<b>Exploring the Role of Large Language Models in the Development of Safety Concepts</b>
13:25 – 13:55	Shaun Feakins, Ibrahim Habli and Phillip Morgan, University of York	<b>What's Your Context? Assuring GPAL in Safety-critical Settings</b>
13:55 – 14:25	Joshua Riley, Kez Smithson Whitehead and Matt Wylie, BMT	<b>Towards predictive accident prevention: can retrieval augmented generation powered artificial intelligence inform preventative mitigation?</b>
14:25 – 14:55	<b>Tea and Posters</b>	
14:55 – 15:25	Adam Casey <sup>1</sup> , Malav Naik <sup>2</sup> , Simon Diemert <sup>1</sup> , Nader Abu El Samid <sup>2</sup> , Jeffrey Joyce <sup>1</sup> , Emmanuel Lesser <sup>2</sup> , Paul Grouchy <sup>2</sup> , 1: Critical Systems Labs Inc, 2: MDA Space	<b>AI-Enabled Monitoring of Space Robotics Telemetry</b>
15:25 – 15:55	Bernard Twomey, Kongsberg Maritime	<b>Maritime Autonomy – Are we making progress?</b>
15:55 – 16:30	<b>Keynote:</b> Phil Koopman, CMU	<b>Overview of Embodied AI Safety</b>

16:30 –  
16:35 Mike Parsons, SCSC

Closing Remarks

16:35 Tea and networking

## 5 Minute 'Pitch' Talks Details

Wednesday 11<sup>th</sup> February, 13:30 – 14:30

- |  |  |
|--|--|
| 1. Beatriz Coutinho, 3SK                 | Why is HRA important in SOFIT for off-road vehicles?   |
| 2. Mohamad Cherry, LSE                   | Authority, Emotion, and Communication Breakdown: An Analysis of the Air France Flight 447 Accident |
| 3. Mohammed Tloul, KU Leuven             | Challenges in Applying STPA to a Wheelchair with Head-Foot Steering System                         |
| 4. Walden Killick, Cambridge Consultants | When Will Quantum Computers Break Encryption?  |
| 5. George Hipwell, BAE Systems           | TBA  |

## Poster Session Details

Wednesday 11<sup>th</sup> February, 17:00 – 18:00

- |  |   |
|--|---|
| 1. Lavinia Burski, AtkinsRéalis        | Transforming Formal Verification: Insights from MALPAS                                |
| 2. Paul Hampton, SCSC                  | OWG introduction  |
| 3. James Inge, MOD                     | IEC 63187 Systems engineering - System safety Complex systems in defence programmes   |
| 4. Jonas Wolf, Vector Informatik       | Goal structuring notation tool (gsn2x)  |
| 5. Andrew Eaton, Consultant            | A Safety Case Report Format: Helping people to understand your safety case            |
| 6. Mohammed Tloul, KU Leuven           | STPA Analysis for a Wheelchair with a Head-Foot Steering System                       |
| 7. Chris Hobbs, Farmhall               | Safer Complex Systems Working Group   |
| 8. Alan Simpson, Ebeni                 | Safe AI Working Group   |
| 9. Kevin King, BAE Systems             | Service Assurance Working Group   |
| 10. Simon Whiteley, Whiteley Aerospace | Addressing Complexity using STAMP Control Structure Models and STPA Hazard Analysis   |
| 11. Davy Pissoort, KU Leuven           | COSAIN: Co-Designing Safety and Control for Autonomous Navigation on Inland Waterways |
| 12. Davy Pissoort, KU Leuven           | ORCA: Orchestrating Resilient and Compliant Agents                                    |
| 13. Mike Parsons, SCSC                 | Data Safety Initiative (DSIWG) Update   |



## Code of Conduct

For speakers and delegates at SCSC events please see the code of conduct:

[https://scsc.uk/file/site/SCSC\\_Code\\_of\\_Conduct\\_-\\_Speakers\\_and\\_Delegates.pdf](https://scsc.uk/file/site/SCSC_Code_of_Conduct_-_Speakers_and_Delegates.pdf)

## Cancellation Policy

Registration fees are refundable (less a £50 cancellation fee) if written notice is received by 31<sup>st</sup> December, 2025. Refunds cannot be made after this date. All refunds will be issued after the symposium.

Refunds cannot be issued due to medical reasons. Delegates are able to replace their attendance with a colleague, but only by notification in advance.

Other problems such as transport strikes or bad weather: we are bound by hotel contractual conditions and are still billed for catering and room charges, etc. Therefore, we regret that we cannot reimburse delegates in the event of these circumstances.

Phone: 01904 954830 Email: [alex.king@scsc.uk](mailto:alex.king@scsc.uk), [mike.parsons@scsc.uk](mailto:mike.parsons@scsc.uk)

---

The full proceedings of the symposium will be given out as a hardcopy book to all in-person symposium attendees. They will also be available from the SCSC website as a PDF (for club members). Further hardcopies are available from Amazon.



# SCSC

For Everyone Working in System Safety

Soft Skills  
for  
Safety  
Practitioners

Learn the soft  
skills that you  
need day to day  
as a safety  
practitioner  
working in  
industry

For safety  
engineers,  
consultants,  
auditors and  
managers

How  
to be  
assertive

Management  
of meetings

Convincing  
budget  
holders

Managing  
difficult  
behaviours

Prompting  
techniques

Supporting  
the safety  
culture

Asking  
the  
right  
questions

And  
more!

Thursday 23 April 2026, BCS London  
[www.thescsc.org](http://www.thescsc.org)

Safety-Critical Systems Club (SCSC)

Safety-Critical Systems Club (SCSC)

## Exhibitors and Sponsors

