

Day 1: Tuesday 11th March

Registration and refreshments: 09:00 – 09:55

Session 1

Chair: Richard Gilham

10:00

Welcome to the Bristol Centre for Supercomputing & Isambard Day 2025

Simon McIntosh-Smith, Bristol Centre for Supercomputing

10:15

Keynote: Empowering European HPC and AI Ecosystem - Case Finland

Pekka Lehtovuori, CSC

Refreshments: 11:15 - 11:45

Session 2

Chair: Christopher Woods

11:45

Free and Open Large Language Models for the Languages and Use-Cases of the British Isles: BritLLM

Pontus Stenetorp, University College London

12:20

Tone Bias in Skin Cancer Image Datasets: UBias

James Pope, University of Bristol

Lunch: 13:00 - 14:00

Session 3

Chair: Anna Price

14:00 - Personality of a Magnet: Simulating Chemical Ordering in FeNi at the Atomic and Sub-Atomic Length Scale

Christopher D. Woodgate, University of Bristol

14:25 - Drug Discovery Using Ligand-Transformer

Shengyu Zhang, University of Cambridge

14:50 - Day 2, Conference Feedback & Isambard Day 2026

Richard Gilham, Bristol Centre for Supercomputing

Refreshments: 15:00 - 15:30

Session 4

Chair: Sadaf Alam

15:30 - Testing the LSST Stack and imSim Performance on Isambard 3

Ritchie Somerville, on behalf of William Lucas & George Beckett, EPCC

15:55- Weather and Climate Modelling on Isambard: Porting the UM and LFRic

Annette Osprey, NCAS-CMS, University of Reading

16:20- Panel: The Evolving Role of Supercomputing DRIs in the Dynamic AI Landscape

Panelists: Pekka Lehtovuori (CSC, Finland), Paul Calleja (RCS, Cambridge, UK), Maxime Martinasso (CSCS, Switzerland), Ritchie Somerville (EPCC, UK), Simon McIntosh-Smith (BriCS, UK)

Close of Day 1: 17:00

Day 2: Wednesday 12th March

Registration and refreshments: 09:00 – 09:25

Session 5

Chair: Simon McIntosh-Smith

09:30 - Keynote: Alps, the Sibling of Isambard-AI

Thomas Schulthess, CSCS

10:30 - Harnessing the Uniqueness of the NHS for GenAI: LifeGPT

Aldo Faisal, Imperial

Refreshments: 11:00 - 11:30

Session 6a - Ballroom 1

Chair: Pete Chase

11:30 - Automated Attacks on LLM Activation Monitors

Eric Winsor, UK AI Security Institute

11:55 - Building Digital Twins of the Universe with the DiRAC HPC Facility

Mark Wilkinson, STFC

12:25 - Language Model Pretraining on Shared Computing Resources: A Case Study of BritLLM

Yao Lu, University College London

Session 6b - Ballroom 2

Chair: Tom Green

11:30 - Semantic Feature Learning for Scientific Data and GPU Performance Evaluation

Jaehoon Cha, Science and Technology Facilities Council

11:55 - High-Order Computational Fluid Dynamics using CODA on Isambard

Christopher Wales, University of Bristol

12:25 - Generative Adversarial Networks and HPC for Simulation of Plasma Turbulence

Jony Castagna, UKRI-STFC Hartree Centre

Session 6c - George White Room

11:30 - Hands-On Workshop Using Isambard-AI to Set Up and Run a Simple Chatbot via a Jupyter Notebook **(Pre-Registration Required)**

Led by Wahab Kawafi, Bristol Centre for Supercomputing

Lunch - 12:45 - 13:45

Session 7a - Ballroom 1

Chair: Matt Williams

13:45 - KidSat: Satellite Imagery to Map Childhood Poverty

Juliette Unwin, University of Bristol

14:10 - Towards Transparent AI in Computational Pathology: Concept Learning for Clinical AI

Greg Verghese, King's College London

14:35 - Extracting Semantics from Cultural Heritage Text

Cédric Mesnage, University of Exeter

Session 7b - Ballroom 2

Chair: Fan Yang-Turner

13:45 - Molecular Dynamics Simulations and the Magic of AI/ML

Stefano Leoni, Cardiff University

14:10 - mkN Benchmark: A Simple Matrix Multiplication Benchmark for High-Order Numerical Schemes

Semih Akkurt, Imperial

14:35 - Deep Learning and High-Performance Computing in Molecular Dynamics

Amir Masoud Nouroollah, Cardiff University

Session 7c - George White Room 13:45 - Getting the Knack with Software Stacks: A Walkthrough to Deploy Software on Isambard Systems

Led by Thomas Green, Bristol Centre for Supercomputing

Close of Day 2 - 15:00