## Centre for High Performance Computing 2025 National Conference



Contribution ID: 400 Type: Talk

# Co-design and federation of computing services for Al and simulation

This presentation will focus on the collaborative, quantitative co-design approach to the deployment of large-scale computing services adopted by the STFC DiRAC HPC Facility in the UK (www.dirac.ac.uk). Over the past 15 years, successive generations of DiRAC services have demonstrated how workflow-centred co-design can maximise the scientific impact of computing investments. The co-design of DiRAC services has ranged from silicon-level to system-level, alongside extensive software development effort, and has delivered significantly increased system capabilities.

I will also discuss how federation can deliver additional research capabilities and optimise service exploitation, while lowering the bar for access to large-scale computing for new users.

Looking to the future, I will explore how co-design can be used to develop cost-effective and energy-efficient heterogeneous computing ecosystems for AI and simulation.

# **Presenting Author**

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#### **Student or Postdoc?**

No. Not a student nor Postdoc.

#### Institute

STFC DiRAC HPC Facility / University of Leicester

### Registered for the conference?

No

#### **CHPC** User

No

## **CHPC Research Programme**

# **Workshop Duration**

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