



EXCALIBUR
10

EXCALIBUR SYSGENX

Garth N. Wells
University of Cambridge

Engineer's House, 11-12 October 2023



**UK Research
and Innovation**



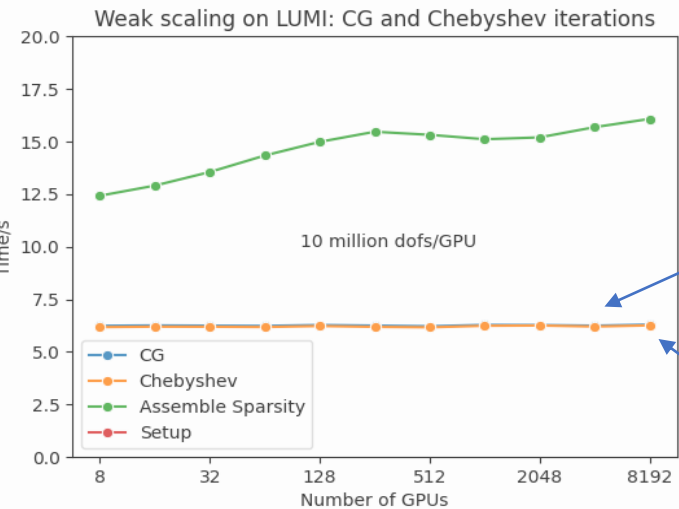
**UK Atomic
Energy
Authority**

Project Status

Vision development of open, high performance, high productivity software environments and tools for PDEs at exascale for important problems from a wide range of fields

Linear algebra on pre-exascale systems

LUMI

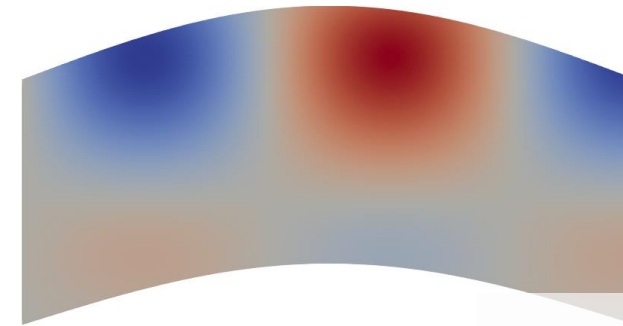


Time remains constant

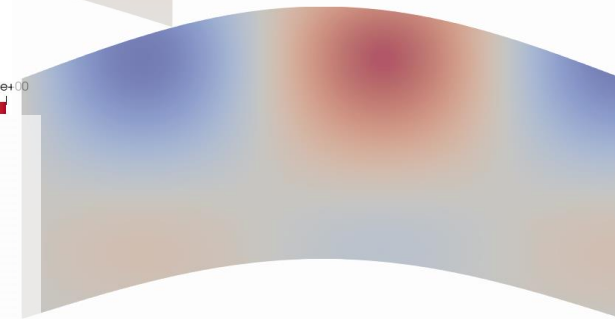
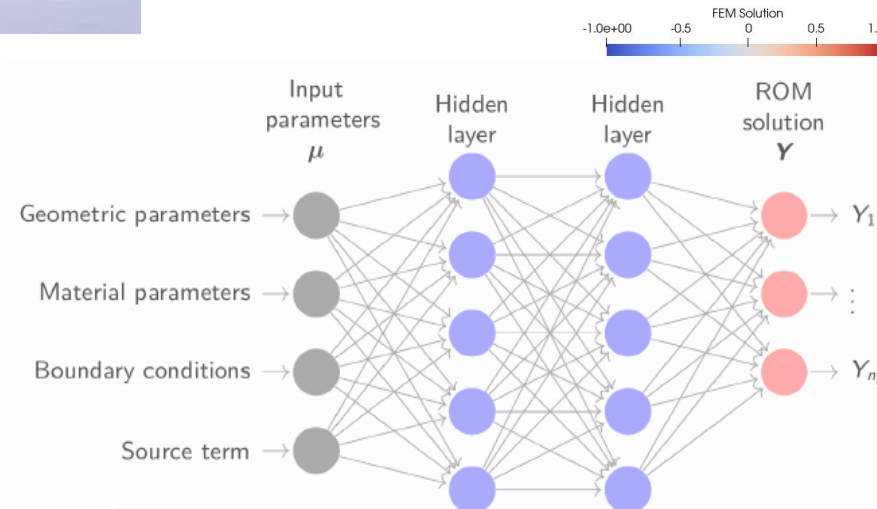
size = 82 billion



AI techniques for reduced-order modelling



full-order solution



reduced-order solution

EXCALIBUR

Current challenges

- We're going ok!
- Recruitment was challenging, shortage of suitably skilled candidates in the UK
Has affected scheduling of research activities

Engagement

- We're holding PDESoft 2024 in Cambridge (1-3 July 2024) with an ExCALIBUR theme. Web site available soon.

