

# New consortium aims to give the UK a world lead in research using High Performance Computing

**Press Release**  
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The largest ever consortium to support UK academic research using high performance computers (HPC) is being established by the University of Edinburgh, the University of Manchester and the Council for the Central Laboratories of the Research Councils' (CCLRC) Daresbury Laboratory.

Professor Timothy O'Shea, Principal and Vice-Chancellor of the University of Edinburgh, Professor Alan Gilbert, President and Vice-Chancellor of the University of Manchester and Professor John Wood, Chief Executive of CCLRC today approved this joint venture, called HPC-UK, to couple their computational science and engineering support teams. These have supported all UK national academic HPC facilities for 20 years. From now on they will work together, pooling their complementary expertise, to provide UK researchers with unprecedented breadth and depth of support in the application of HPC technology to the most challenging scientific and engineering problems.

Professor O'Shea, said: "Edinburgh has pioneered novel computing solutions to challenging science problems for 25 years. HPC-UK is a natural next step that will enable us to continue to innovate while tackling the most ambitious projects." These range from climate change to personalised medicine, from understanding the fundamental building blocks of nature to the evolution of the whole universe, from modelling fusion reactors

to financial forecasting. They affect all our lives and HPC is the key.

Professor Wood, said: "CCLRC has led HPC applications enabling predictive calculations of enzymes and catalysts, simulations of cell membranes, accurate models of combustion and aerodynamics, and detailed nutrient and fluid flow models of off-shore water quality. Already working with the key UK projects across the community, HPC-UK plans to engage with, and encourage, new and emerging disciplines." These demand a multidisciplinary approach: computer design, software engineering, numerical algorithm and visualisation expertise combine, often with several fields of science, to tackle the most complex problems. The consortium will grow to include new areas of activity, so that its expertise continues to match the requirements of UK research.

Professor Gilbert, said: "As the problems get more complex, and computers get bigger and more expensive, simulation is turning into 'big science' - becoming a multinational and uniquely multidisciplinary enterprise. HPC-UK is our response to keep the UK at the forefront." HPC-UK will ensure that UK researchers are best placed to exploit emerging international facilities and it will provide the UK with the capability to host them. It aims to place the UK at the top of nations exploiting this strategic technology.

[www.hpc-uk.ac.uk](http://www.hpc-uk.ac.uk)