

## **The UK eScience Programme and the Grid**

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### **Abstract:**

The talk describes the £120M UK 'eScience' initiative and begins by defining what is meant by the term eScience. The majority of the £120M, some £85M, is for the support of large-scale eScience projects in many areas of science and engineering. The infrastructure needed to support such projects needs to allow sharing of distributed and heterogeneous computational and data resources and support effective collaboration between groups of scientists. Such an infrastructure is commonly referred to as the Grid. The remaining funds, some £35M, constitute the eScience 'Core Program' and are intended to encourage the development of robust and generic Grid middleware in collaboration with industry. The key elements of the Core Program will be described including the construction of a UK eScience Grid. In addition, the talk will include a description of the pilot projects that have so far received funding. These span a range of disciplines from particle physics and astronomy to engineering and healthcare. We conclude with some remarks about the need to develop a data architecture for the Grid that will allow federated access to relational databases as well as flat files.