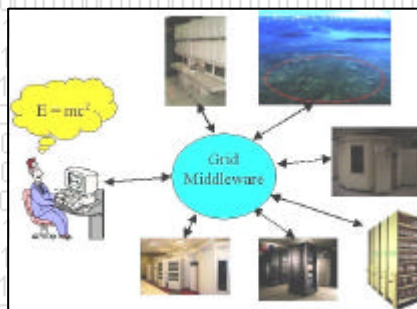
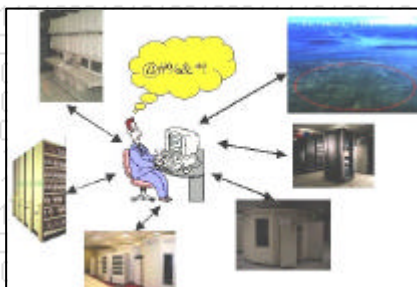


The Grid

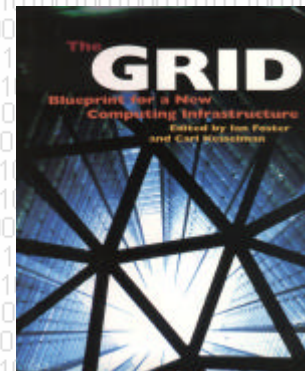
The **World Wide Web** was designed at CERN, Geneva to facilitate exchange of information between scientists working on different computers, perhaps at different sites.

While the Web is aimed mainly at the exchange of information, the **Grid** is concerned with the exchange of computer power, data storage and access to large databases.

Instead of individual scientists having to interact with each computing resource separately and 'by hand', they will access them as essentially one computer system managed by new "middleware" software.



The name '**The Grid**' comes from analogy with the Electricity Power Grid where there is transparent access to electricity through standard interfaces (i.e. plugs and sockets). The complexity of the generation and supply is hidden from the end user.

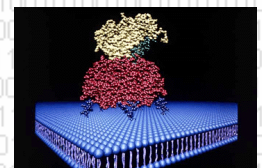
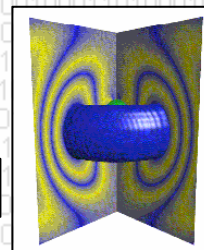


Ian Foster and Carl Kesselman, editors, "**The Grid: Blueprint for a New Computing Infrastructure**".

"A computational Grid is a hardware and software infrastructure that provides dependable, consistent, pervasive and inexpensive access to high-end computational capabilities."

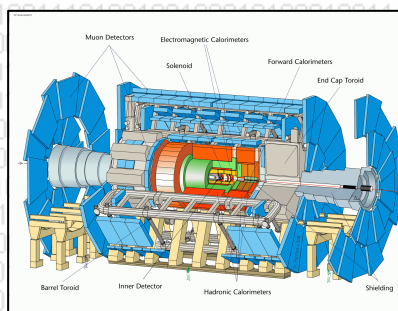
You simply submit your job to the 'Grid' - you shouldn't have to know where the data is or where the job will run. The Grid middleware will take care of running the job where the data is or moving the data to where there is CPU power available

Grid Applications



Biology and Medicine

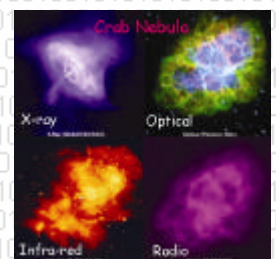
Supercomputing



Particle Physics



Collaborative Engineering



Virtual Observatories

The **Web** gives ubiquitous access to distributed **information**.
The **Grid** will give ubiquitous access to distributed **computing resources** and hence **knowledge**.