



**PUSHING THE FRONTIERS OF COMPUTING TECHNOLOGY
TO SUPPORT RESEARCHERS: INTERACTIVE EUROPEAN GRID**
For scientific applications requiring advanced visualization, interactive steering in real time, and supercomputing parallel power but as simple as using a workstation

Project acronym:
int.eu.grid

Contract n°:
031857

Project type:
I3

Start date:
1/05/2006

Duration:
24 months

Total budget:
2637000 €
EC Funding:
1986000 €

Total effort in person-months:
604

Web site:
www.interactive-grid.eu

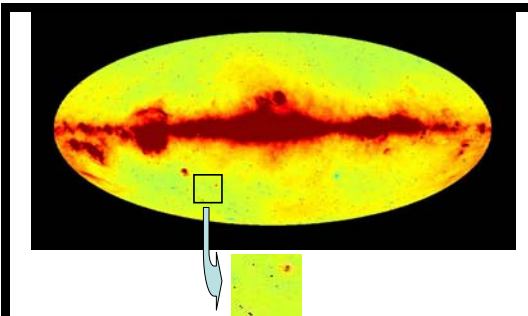
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Project participants:

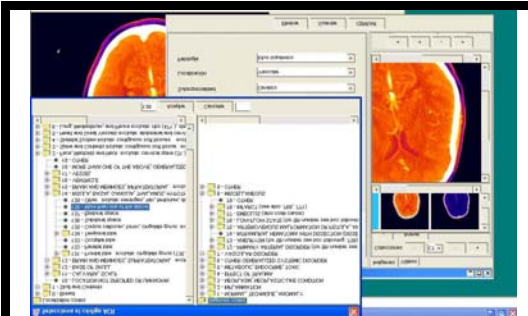
CSIC	ES
LIP	PT
PSNC	PL
FZK	DE
UAB	ES
CYFRONET	PL
GUP	AT
TCD	IE
CESGA	ES
IISAS	SK
ICM	PL
BIFI	ES
HLRS	DE



PLASMA VISUALIZATION
To design new fusion devices, like ITER, researchers need to understand the trajectories of plasma particles, and how they evolve when design parameters are modified. A single computer is limited to simulate and visualize thousands of particles, while the Interactive Grid can handle millions, providing researchers a realistic answer.



FIRST IMAGES OF THE UNIVERSE
ESA will launch the Planck mission in 2008 and astrophysics researchers are getting ready now by simulating the measurements of the Planck satellite. The large images require new powerful tools and filters that will be used interactively thanks to the Interactive Grid.



BRAIN DIAGNOSTIC
Doctors at HUMV Hospital in Spain need to develop more complex and precise techniques for diagnostic on brain images and to conduct testing of new algorithms by fast processing over large volumes of data. The Interactive Grid offers the computing power for this application that can visualise and annotate DICOM images.



CONTROL OF POLLUTION
An SME company in Slovakia is developing a complete model suite to analyze the evolution of pollution clouds. The simulation allows visualizing the behaviour of the pollutant clouds for a whole week using weather and meteorological data as input, and requires the Interactive Grid power to execute in minutes, not in days!

THE INTERACTIVE EUROPEAN GRID ALSO OFFERS TOOLS TO SUPPORT DISTRIBUTED COLLABORATION OF RESEARCHERS, ASK FOR A DEMO!

