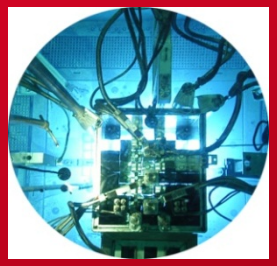
e-infrastructure
A boost for innovation

DE LA RECHERCHE À L'INDUSTRIE

cea




Jean GONNORD
Chef de Projet Simulation Numérique
CEA/DAM




www.cea.fr

A 20 years global strategy on line with H2020

- **Independent access to the technology**
- **World class infrastructures**
- **Important spin-off to industry and society**



TERA100: First petaflop/s computer designed in Europe

AN ACTION PLAN FOR EUROPEAN LEADERSHIP IN HPC

- *Provide a world-class European HPC infrastructure, benefitting a broad range of academic and industry users, and especially SMEs,*
- *Ensure independent access to HPC technologies, systems and services for the EU;*



How does CEA participate to these challenges ?

CURIE
For the whole European scientific community

World class infrastructure

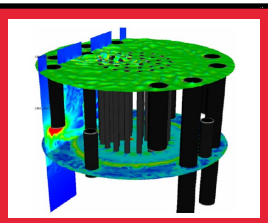
Independant access to the technology

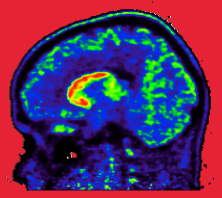
AIRAIN
Cost & risk Shared with industrials

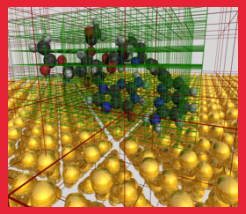
CEA Exa Project
French HPC industrial plan
ETP4HPC

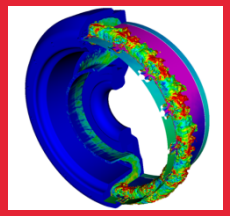
Ter@tec
Promotion of HPC industry & SMEs

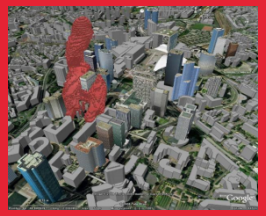
Broad range of academic & industry users

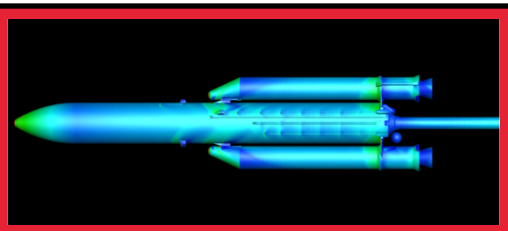

Energy


Health


Biology


Combustion


Security


Ariane 5

E-infrastructures: a boost for innovation

Downstream spin-off on the world class infrastructures

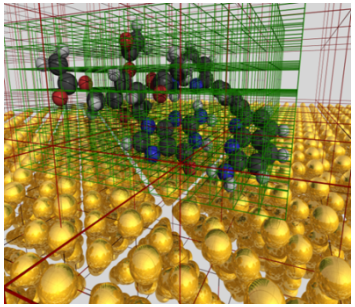
CURIE: The French contribution to PRACE



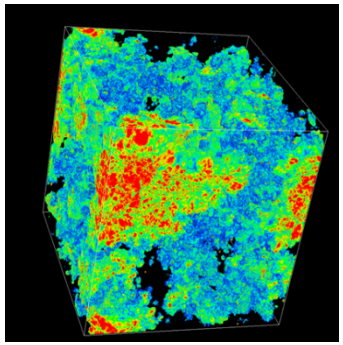
AIRAIN: CEA sharing risk with industry



Research

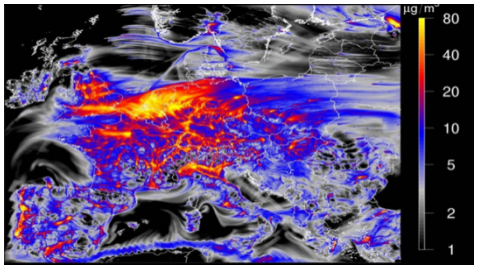


CEA/DSM

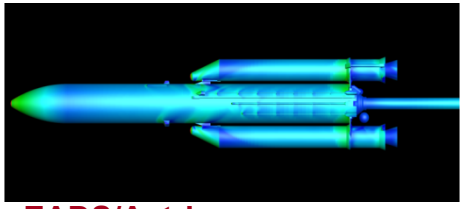


CEA/DSM

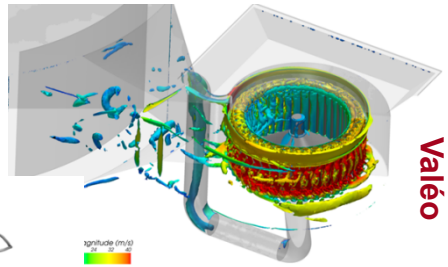
Industry



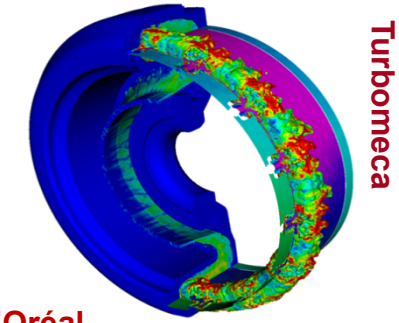
INERIS



EADS/Astrium

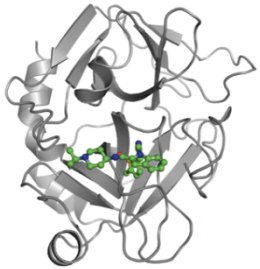


Valéo



Turbomeca

L'Oréal



CEA/DSV



E-infrastructures: a boost for innovation

Upstream spin-off on the world class infrastructures

Co-design



TERA100: First petaflop/s computer designed in Europe

More than 120 HPC references across Europe, America, Africa and Asia since 2010

A significant industrial success
More than 1000 people hired by BULL

World class infrastructures over 1 petaflop/s



CURIE: 2 petaflop/s



HELIOS: x petaflop/s



Beaufix & Prolix

A platform to support the EU strategy: ETP4HPC

A cPPP signed between the Commission and ETP4HPC in december 2013

Commission européenne

ETP 4 HPC
THE EUROPEAN TECHNOLOGY PLATFORM FOR HIGH PERFORMANCE COMPUTING

Led by European HPC Technology providers with an objective to build a competitive HPC value chain in Europe.

Strategic Research Agenda outlines the research priorities of European HPC on its way to achieve Exascale capabilities



A partner of the Contractual **Public-Private Partnership (cPPP) for HPC** the aim of which is **building a competitive HPC Eco-system in Europe** based on the provision of Technologies, Infrastructure and Applications.

Steering Board
15 members

48 members Jan. 2014
- Companies, SME, ISVs,
- Service providers,
- Research Centres

www.etp4hpc.eu