

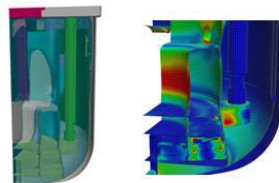
DE LA RECHERCHE À L'INDUSTRIE



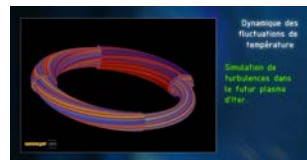
Didier JUVIN

**HPC & Simulation
Program Manager**

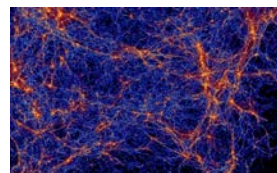
www.cea.fr



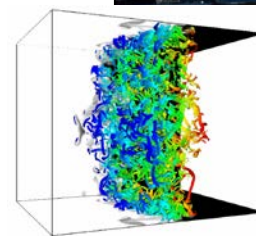
Nuclear Energy



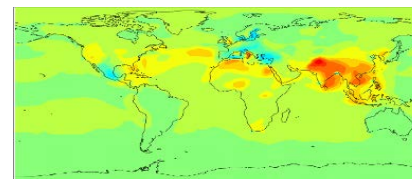
Fusion



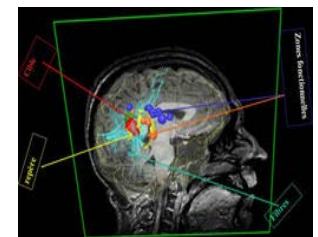
Astrophysics



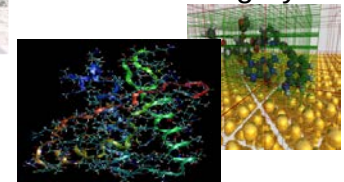
Defense Simulation Program



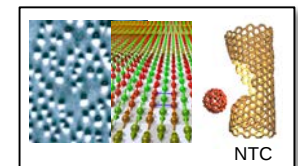
Climate modeling



Medical Imagery



Personalized Medicine



Predictive Material

A strategy based on an open ecosystem

Technologies

Develop a globally competitive industrial technology value chain towards exascale



**R&D national program to exascale
phase 3 (2018 – 2020)**

EURO-HPC



Applications

modelisation
physics simulation

Industry

Defense



Big Data Plan

Performance
Optimization
Productivity



A strategy based on an open ecosystem

Three complementary coordinated pillars,
in symbiosis with the French and European policy.

Technologies

Develop a globally competitive industrial
technology value chain towards exascale



R&D national program to exascale
phase 3 (2018 – 2020)



EURO-HPC



Applications

Expand the limits in modelisation
and complex multiphysics simulation

Research

Industry

Defense

Maison
de la Simulation



Supercomputer and Big Data Plan



Energy



Performance
Optimization
Productivity



Infrastructures

Research

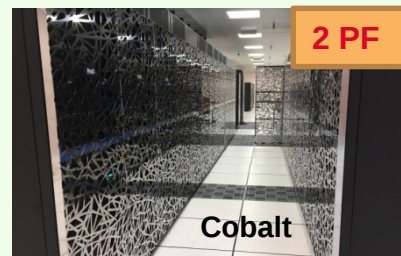
Industry

Defense



9 PF

Joliot-Curie



2 PF

Cobalt



Extension
Cobalt



2.5 PF

Tera1000-2 Yoccoz



25 PF

Développer de nouveaux usages

Journée CCRT 2017



POUR RÉPONDRE AUX BESOINS DES PARTENAIRES:

CCRT et IA:

- Framework Nvidia Deep learning disponible au CCRT
- Tenue d'ateliers de formations en collaboration avec Nvidia
- Experimentation du framework Intel fin 2018

CCRT et Quantique :

- Accès mutualisé au simulateur quantique QLM d'Atos (to be announced)
- Collaboration avec le Centre de Compétences Calcul Quantique de Teratec et la Maison de la Simulation