

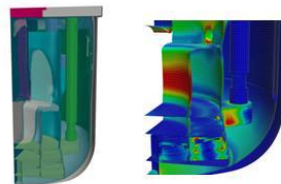
DE LA RECHERCHE À L'INDUSTRIE



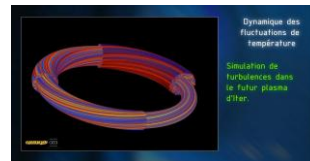
Didier JUVIN

HPC & Simulation
Program Manager

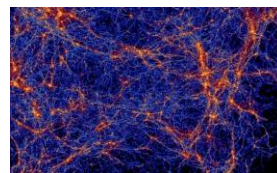
www.cea.fr



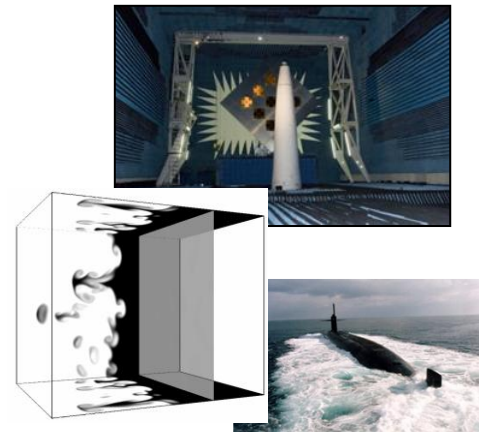
Nuclear Energy



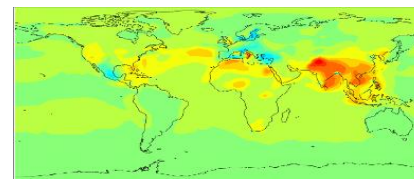
Fusion



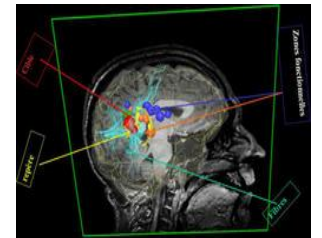
Astrophysics



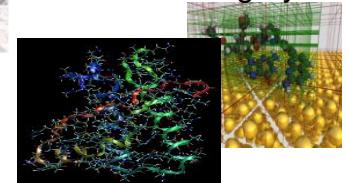
Defense Simulation Program



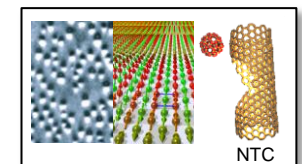
Climate modeling



Medical Imagery



Personalized Medicine



Predictive Material

A strategy based on an open ecosystem

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

Technologies

Develop a globally competitive industrial technology value chain towards exascale



CEA operator for the technology part of the R&D national program to exascale



CEA founding partner of



Applications

Expand the limits in modelisation and complex multiphysics simulation

Research

Industry

Defense

Maison de la Simulation



France's guarantee capacity of deterrence without any nuclear test



Supercomputer and Big Data Plan



Energy



Performance Optimization Productivity



Infrastructures

Research

Industry

Defense



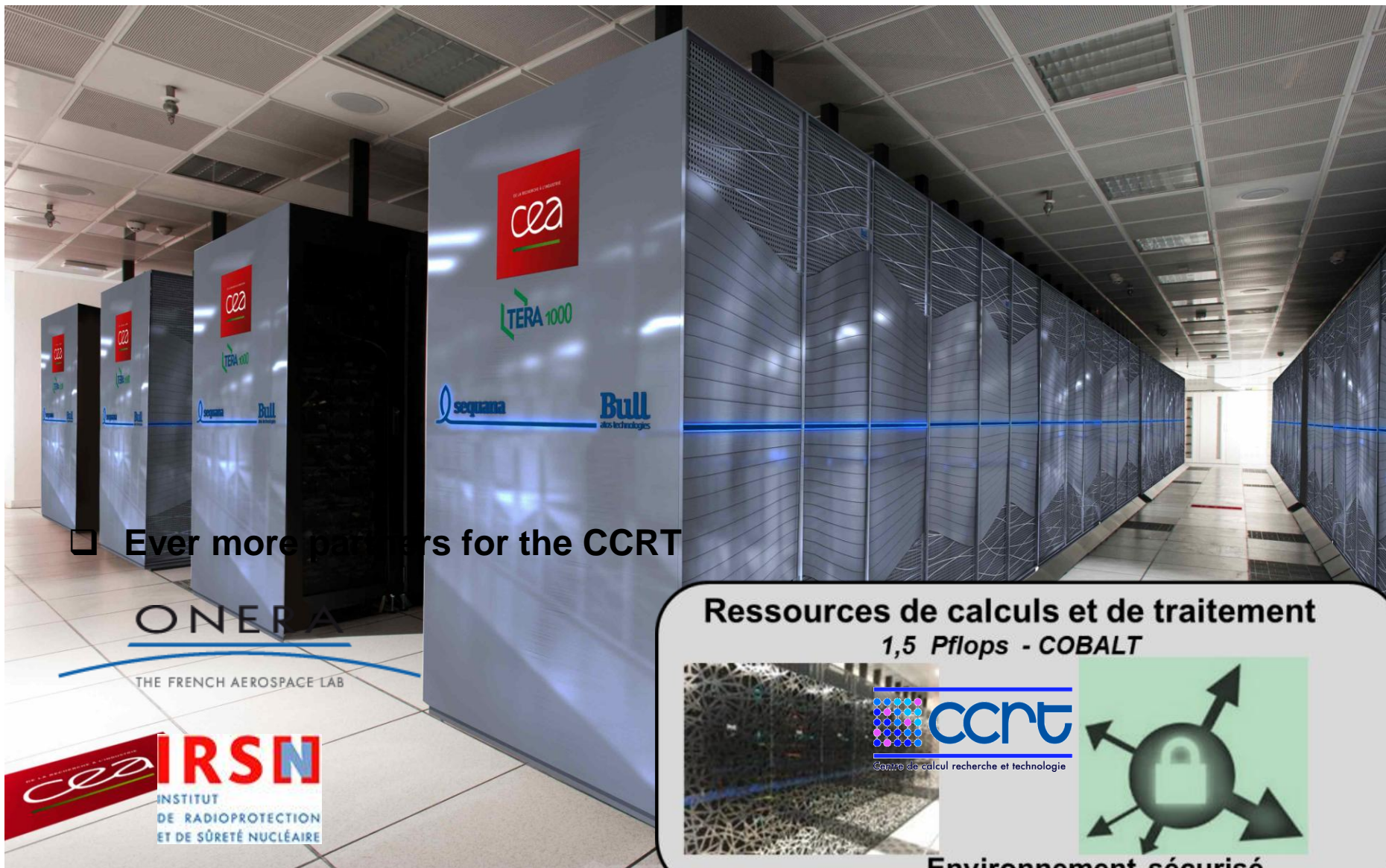
Curie



TERA1000: Xeon and Xeon PHI configurations.

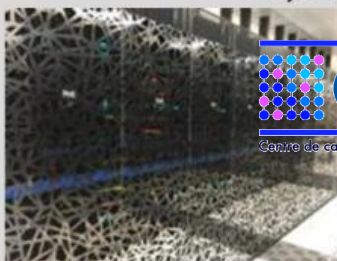


2017 major achievements



□ Ever more partners for the CCRT

Ressources de calculs et de traitement
1,5 Pflops - COBALT

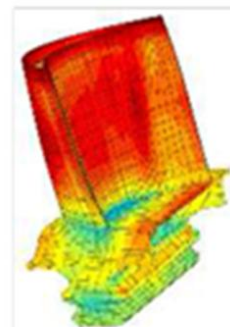
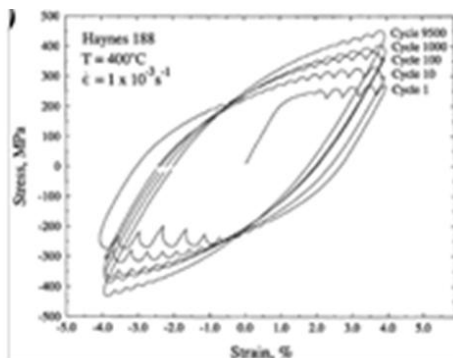
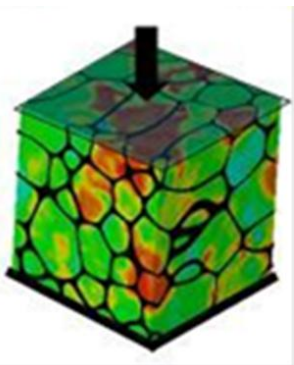


Environnement sécurisé

ONERA
THE FRENCH AEROSPACE LAB

cea IRSN
INSTITUT
DE RADIOPROTECTION
ET DE SÛRETÉ NUCLÉAIRE

a new HPC applicative platform for material simulation involving CEA & major industrial partners from aeronautics, cosmetics, automotive



Compréhension et analyse des essais à l'échelle du matériau

Modélisation avancée du comportement des structures



L'ORÉAL

