

November 19, 2009



# Intel Makes Multi-Million Euro Investment to Create European Exascale Computing Research Center

## NEWS HIGHLIGHTS

- Researchers at a new European Intel lab will explore computers with a thousand times the performance of today's fastest supercomputers.
- Effort is part of Intel Labs Europe, Intel's research network of 900 researchers in the European region.
- Intel has committed a multi-million Euro investment toward a new lab. CEA, UVSQ and GENCI will jointly match Intel's contribution.

PARIS--(BUSINESS WIRE)-- Commissariat à l'Energie Atomique, Grand Equipement National de Calcul Intensif, Intel Corporation and Université de Versailles Saint-Quentin-en-Yvelines have entered into an agreement to create an Exascale Computing Research Center. Part of Intel's European research network - [Intel Labs Europe](#) - the center will explore how to build high-performance computing systems with a thousand times the performance of today's fastest supercomputers. The term "exascale" refers to computers that are able to process 1 trillion - or 1 million million million - instructions per second.

Intel will support the Exascale Computing Research Center with a multi-million Euro investment over a 3-year period. The French Atomic Energy Commission (Commissariat à l'Energie Atomique), the Versailles Saint-Quentin-en-Yvelines University (Université de Versailles Saint-Quentin-en-Yvelines) and the French National High-Performance Computing Agency (Grand Equipement National de Calcul Intensif) will combine to match Intel's contribution. This is Intel's first joint lab in Europe focused exclusively on [high-performance computing](#). It will complement and extend Intel's [existing high-performance computing research programs](#), investments and initiatives, including the [Intel Academic Community Program](#) and European Space Agency's ["Mapping the Globe from Space"](#) project.

"France has taken a leading role in driving high-performance computing research in Europe," said Steve Pawlowski, Intel senior fellow and general manager of Intel Architecture Group's central architecture and planning. "We chose to work with these three organizations because of their world-class software competency in exascale and high- performance computing."

The research agenda of the Exascale Computing Research Center will include integrating multi petaFLOPS systems, developing advanced performance optimization techniques, and [collaborating with end users to optimize supercomputer performance](#) in areas such as energy, seismology, computational fluid dynamics and [health care](#).

The advent of exascale is expected to enable supercomputers to solve much more complex problems than today. For example in health care this capability should enable highly

sophisticated genome calculations, enabling individualized patient treatment, or simulation of cell interactions to provide new cancer treatments. Another application can be found in seismology where exascale computing could enable more detailed prediction of ground movement at sites with high security requirements or where frequent movement is expected. In climate modeling, more accurate long-term forecasts and much more detailed local weather forecasts could be made.

The Exascale Computing Research Center will combine French research expertise and high-performance computing vision with Intel's leading products, technologies and experience in this area. The lab will employ about a dozen people initially and is expected to eventually grow to about three times that number.

Intel has a rich history of innovation and creativity in Europe with research and development programs encompassing areas such as chip design, software development, mobile communications and services, atomic-level chip research, development of key Intel products, and research on technologies that could help the aging population to lead healthier, better lives.

Intel's research and development efforts include [Intel-owned labs](#) focused on development of Intel products, [joint research with European universities](#), open innovation and collaboration with industry and academia, participation in EU framework programs and cooperative standards development work with industry partners that deliver increased value and productivity to consumers.

#### About Intel Labs Europe

Intel R&D/Innovation in Europe is driven by a network of research labs, product labs and innovation labs spanning the region as well as a variety of Intel business units. Intel Labs Europe was formally established in early 2009 as the central means of coordinating activities across this diverse and extensive network, and to strengthen and improve Intel's alignment with European R&D. Today, Intel Labs Europe consists of 19 labs employing more than 900 research professionals.

#### About Intel

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Source: Intel Corporation