

PRESS RELEASE





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NEW SUPERCOMPUTING COLLABORATION BRINGS EUROPE AND JAPAN CLOSER

HANAMI (HPC AlliaNce for Applications and supercoMputing Innovation) is the next generation of the HPC alliance between Europe and Japan

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Health, climate, quantum physics, or materials science. These are just some of the areas in which advanced computing will play a leading role as the basis for scientific, industrial, and social development. To strategically position Europe and Japan in this area of research, HANAMI, the HPC Alliance for Applications and Supercomputing Innovation: the Europe-Japan collaboration, was born.

Through HANAMI, the EuroHPC seeks to promote advances in supercomputing by facilitating the exchange of computing resources between Europe and Japan, and in this sense the project will port existing code, test performance, and the viability of applications to run on alternative computing architecture. For this purpose, European scientists will be able to access the Fugaku supercomputer, a machine capable of performing more than a billion operations per second. Moreover, Japanese researchers will have the opportunity to explore European computing architectures.

This collaboration reflects a global trend towards international geopolitical alliances around computing, a way for countries to assert their competitiveness. On the European side, the objectives are also to establish or strengthen technological and research partnerships with democracies - HANAMI being an example of this desire, favoring a partnership that has been going on for more than a decade.

"This collaboration is a great opportunity to work with one of the leading countries in HPC on scientific and societal challenges and share experiences of the efficient use of the most advanced computing architectures in Japan and Europe", said France Boillod-Cerneux, HANAMI's coordinator, emphasizing the importance of preparing scientific software for the future. She highlights, for example, the similarities between the research centers and the relationship with industry in the two territories —with companies such as Eviden and Fujitsu, for example — but also the "synergies around CPU architectures", while maintaining "sovereignty concerning the design and development of scientific applications".

"Since we already collaborate through innovation and research, HANAMI completes the scientific value chain: from the observation instrument and the collection of real data, through the development of scientific applications to model the observation, and then the execution on cutting-edge supercomputers," summarizes Boillod-Cerneux. In addition, HANAMI will organize annual high-level symposia, bringing together members of the European and Japanese academic community to discuss topics such as biomedicine, materials science, and climate research. The aim will be to promote the development of science and encourage the community to engage within HANAMI. But the project doesn't stop there. For the future, there will be a road map to enable more sustainable and frequent collaborations between Europe and Japan, both in the academic and industrial spheres.

The project, led by the French Alternative Energies and Atomic Energy Commission (CEA), in France, includes 14 European organizations: Barcelona Supercomputing Center (BSC) and Catalan Institute of Nanoscience and Nanotechnology (ICN2), from Spain, CINECA and National Research Council of Italy (CNR), from Italy, Centre national de la recherche scientifique (CNRS), from France, IT Center for Science (CSC), from Finland, Deutsches Klimarechenzentrum (DKRZ), Forschungszentrum Jülich (FZJ), and the High-Performance Computing Center of the University of Stuttgart (HLRS/USTUTT), from Germany, European Centre for Medium-Range Weather Forecasts (ECMWF), from UK, Institute for Systems and Computer Engineering, Technology and Science (INESC TEC), from Portugal, KTH Royal Institute of Technology (KTH), from Sweden, and University of Warsaw (UW), from Poland.

The project also brings together 10 Japanese institutions, namely, Japan Agency for Marine-Earth Science and Technology (JAMSTEC), Kyushu University, National Institute for Environmental Studies, National Institute for Materials Science, Research Center for Advanced Science and Technology (RCAST), RIKEN, Tokyo Institute of Technology (TITECH), University of Tokyo, University of Tsukuba, and Yokohama University.

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