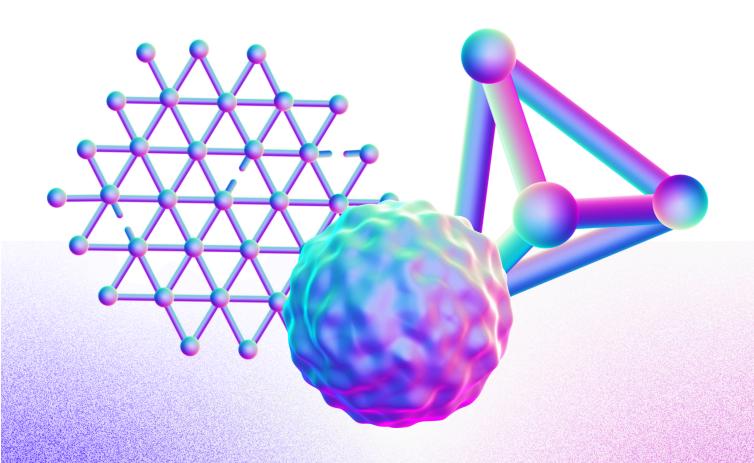


HPC ALLIANCE FOR APPLICATIONS AND SUPERCOMPUTING INNOVATION: THE EUROPE - JAPAN COLLABORATION



# **KICK-OFF MEETING**



# **1ST HIGH-LEVEL SYMPOSIUM**





A MESSAGE FROM OUR COORDINATOR

MISSION AND OBJECTIVES

CONSORTIUM

**IV** RESEARCH AREAS

V CONTACTS





France Boillod-Cerneux CEA

Europe and Japan have a long mutual history regarding high performance computing (HPC). Collaborations were already ongoing between European research organization, including supercomputing centers and Japan. What are the similarities between both regions?

First, they have been collaborating through scientific application large research infrastructures, such as astrophysics and fusion (and many others). It was then natural that Europe and Japan would also collaborate regarding HPC, as supercomputers are implicitly linked with these large instruments: supercomputers exploit and/or enhance the observations done thanks to the large instruments.

Europe and Japan have both developed their HPC industry and ecosystems, from innovative and advanced hardware/software design toward development and optimization of scientific applications, such as climate and weather modeling, laser plasma physics or biomedical.

HANAMI, the HPC collaboration between Europe and Japan is proud to strengthen and extend this ecosystem. We gathered scientists from both regions, major supercomputing centers, around common challenges (namely material science, climate and weather modeling, biomedical): HANAMI is giving the framework to foster the scientific applications, promote excellence and create opportunities or young researchers to work in Europe and in Japan.

HANAMI is proud to pave the way for the HPC collaboration between Europe and Japan: We are looking forward extending our collaboration framework in the future with like-minded partners!

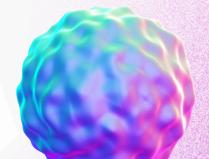
- Address the priority domains that are climate and weather modeling, biomedical and material science of the HPC collaboration;
- Advise and promote a sustainable collaboration between Europe and Japan for the HPC community;
- Promote the exchange of researchers and engineers between Japan and the EU, and elaborating a roadmap for future actions to enhance cooperation.

## **OBJECTIVES**

HANAMI wants to promote scientific projects involving both Europe and Japanese institutes, and will assist the researchers to access supercomputers in both Japan and Europe. HANAMI embeds leading research institutes and supercomputing centers to tackle exascale areas and beyond.

## ROADMAP FOR THE FUTURE

HANAMI will define a sustainable framework for the cooperation between European and Japanese counterparts, bringing together research organisations, research-supporting organisations, industrial partners, funders, and policymakers and creating a link with other European projects and cooperation initiatives between the regions.



## The HANAMI consortium is led by the French Alternative Energies and Atomic Energy Commission (CEA) in France and includes 15 European organizations and 11 Japanese institutions.















































東京大学 先端科学技術研究センター Research Center for Advanced Science and Technology The University of Tokus

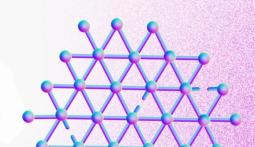






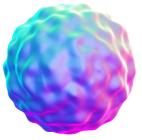






#### **Climate and Weather Modeling**

HANAMI will establish common benchmarks to measure the performance and replicability of weather and climate models across different HPC platforms. This will contribute to further improvement and sustainability of the world-leading models in both Japan and Europe.



#### **Materials Science**

The project's materials scientists will develop innovative computational tools to advance large scale simulations towards the optimisation of materials for cleaner energy solutions.



#### **Biomedical Science**

Our researchers will integrate new methods for computing long-range interactions as well as for integration experimental and machine-learning information into European and Japanese biomolecular simulation packages.



## **Project's Coordination**



<u>Email</u>

## **Communication Channels**



**Website** 



**LinkedIn** 



 $\underline{\mathsf{X}}$ 



**Bluesky** 



**YouTube** 









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