Hpc AlliaNce for Applications and supercoMputing Innovation: the Europe - Japan collaboration (HANAMI)
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A number of European leading Research Organizations (referred as RTOs hereafter) and research supporting organizations, with a long history of scientific and technology collaboration with Japan, are building a consortium for a proposal focusing on the development of joint High Performance Computing (HPC) applications for future generations of supercomputing platforms/ architectures (preexascale, exascale, post-exascale) from Europe and Japan. European and Japanese research centers work together to develop and optimize applications of these methods in various scientific fields, such as material, biomedical and health (especially covid19 research, drug design …), and environmental sciences (such as climate modeling, seismology and prevention of natural disasters), and many other fields such as high energy physics, astrophysics, quantum computing, etc.
The existing joint activities between the European consortium and the Japanese research institutes will bring together the required expertise to develop applications: this expertise ranges from fundamental research and applied science for designing new models, to the optimization, development and the integration of new and ambitious workflows and models to efficiently profit from pre-exascale, exascale, post-exascale and hybrid architectures deployed or already operational in Europe and Japan.
The European consortium gathered in the HANAMI proposal is willing to support and foster joint scientific teams to improve the performance and transferability of European and Japanese HPC applications by leveraging the skills and expertise of the scientific community within Europe and Japan. This consortium focuses on the HPC, AI and DA application communities, represented by the CoEs, academic and industrial organizations addressing the strategic research areas that are material, biomedical and climate.