



PRACE – The European HPC Infrastructure

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The mission of PRACE (Partnership for Advanced Computing in Europe) is to enable high impact scientific discovery and engineering research and development across all disciplines to enhance European competitiveness for the benefit of society. PRACE seeks to realize this mission by offering world class computing and data management resources and services through a peer review process.

This talk gives a general overview about PRACE and the PRACE research infrastructure (RI). PRACE is established as an international not-for-profit association and the PRACE RI is a pan-European supercomputing infrastructure which offers access to computing and data management resources at partner sites distributed throughout Europe. Besides a short summary about the organization, history, and activities of PRACE, it is explained how scientists and researchers from academia and industry from around the world can access PRACE systems and which education and training activities are offered by PRACE. The overview also contains a selection of PRACE contributions to societal challenges and ongoing activities. Examples of the latter are beside others petascaling, application benchmark suite, best practice guides for efficient use of key architectures, application enabling / scaling, new programming models, and industrial applications.

The Partnership for Advanced Computing in Europe (PRACE) is an international non-profit association with its seat in Brussels. The PRACE Research Infrastructure provides a persistent world-class high performance computing service for scientists and researchers from academia and industry in Europe. The computer systems and their operations accessible through PRACE are provided by 4 PRACE members (BSC representing Spain, CINECA representing Italy, GCS representing Germany and GENCI representing France). The Implementation Phase of PRACE receives funding from the EU's Seventh Framework Programme (FP7/2007-2013) under grant agreements RI-261557, RI-283493 and RI-312763. For more information, see www.prace-ri.eu