

General Purpose High Performance Computing as Competitive Advantage for Scientists

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High Performance Computing (HPC) denotes the fastest approaches to simulation and analysis on high-end equipment for a variety of different research, engineering and business domains. Using machines of this category is not trivial, as performance advantages require dedicated software on specialized hardware. Once the challenges are conquered, models of higher resolution and accuracy with longer execution times can be investigated. The possibility of using HPC is therefore a competitive advantage for scientists and engineers.

A review of the usage and application of one of the worlds largest general purpose machines, SuperMUC and an outlook on its successor SuperMUC NG will demonstrate the scientific advantage of HPC in Europe and beyond.