High-performance computing for scientific and applied problems

Abstract

This project is aimed at learning parallel programming technologies for carrying out computations on hybrid platforms: MPI, OpenMP, CUDA, OpenCL, and hybrid technologies: MPI+OpenMP, MPI+CUDA, etc. All stages of application development for scientific and applied tasks will be presented in the context of solving a task: development of parallel algorithms, its implementation on different computing architectures, efficiency analysis, development of GUI or we-services for these applications. The development of applications will be provide on the Hybrilit platform (http://hlit.jinr.ru/en/).

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