Supercomputing Center of Moscow State University: Computational Factory and Education VI.V.Voevodin

Today high performance computing technologies make the key development trend in many countries. This is more important in view of the fact that today computation sciences come to the fore practically in all economic spheres from researches to industry and business. In view of significance of development and practical application of high performance computing technologies the system of higher education faces the most important task of operative and mass training of specialists in computational sciences, parallel computing, high performance computing. This task cannot be accomplished by simply putting some new courses and disciplines into the study programs. It requires a serious systematic approach. It requires serious changes in foundations of higher education. This is important today but this will be extremely important for the exascale era. This is vital for exascale. In the talk basic principles of proposed changes will be discussed as well as the main results of the national presidential project "Supercomputing Education" will be presented to illustrate current changes in Russia for the last three years.