The goal of the school is to teach scientists modern computer hardware and programming to provide a foundation for future computational research using High Performance Computing (HPC).

Participants will learn how to improve the efficiency of their research codes, and to parallelize them. Lectures on a selection of technical aspects of modern HPC hardware will be mixed with introductions to widely used parallel programming tools and libraries. The hands-on sessions will allow participants to learn from examples of problems of general scientific interest. Topics will cover numerical methods and parallel strategies, as well as data management.

The programme specifically addresses the needs of scientists using, writing, or modifying HPC applications, and will not assume, require, or provide significant IT and HPC resource management skills. It will be mainly based on fundamental HPC-relevant features in widely used scientific software for high-performance computing.

There is no registration fee and limited funds are available for travel and local expenses.