



# Using the Parallel Processing Power of the GWWDG Scientific Compute Cluster

## Upcoming Introductory and Parallel Programming Courses

GWWDG operates a scientific compute cluster with currently 14,800 cores and a total compute power of 200 Teraflops ( $2.0 \cdot 10^{14}$  floating point operations per second), which can be used by all scientists of the institutes of GWWDG's supporting organisations, University of Göttingen and Max Planck Society.

In order to facilitate the access to and the efficient use of these computing resources, GWWDG offers introductory and parallel programming courses, held at GWWDG's site 'Am Faßberg'.

The next courses in 2016 are

> April 18th, 9:30 am - 4:00 pm

### **Using the GWWDG Scientific Compute Clusters – an Introduction**

This course explains all steps for accessing GWWDG's clusters, to compile and install software, and to work with the batch system for the execution of application jobs. The course is intended for new or inexperienced users of the clusters.

> April 19th - 20th, 9:15 am - 5:00 pm

### **Parallel Programming with MPI (Including MPI for Python)**

This course introduces the message passing interface (MPI) for programming parallel applica-

tions in FORTRAN, C, and in Python. All concepts will be illustrated with hands on exercises. Examples of parallel applications will be presented and analysed.

> May 10th, 9:15 am - 4:30 pm

### **High-level, High-performance Technical Computing with Julia**

Julia is a modern programming language combining high-level dynamic programming with high performance. The course covers the basics of Julia including numerical computing, parallel computing, and statistical methods.

These three courses are repeated regularly. Other courses on parallel computing, dealing with more specialized topics can be arranged on demand. The possible subjects include parallel programming for shared memory systems and for graphics processors, and using extensions of C or Fortran with high level parallel constructs.

More Information about the courses held regularly or on demand at [www.gwdg.de/scientific-computing-courses](http://www.gwdg.de/scientific-computing-courses).

Information for registering for the courses at [www.gwdg.de/courses](http://www.gwdg.de/courses).

If you have any further questions please contact [support@gwdg.de](mailto:support@gwdg.de).