MHPC 2015: applications now open

The second edition of the master organized by SISSA and ICTP is set to start

May 21, 2015

Students who have just completed the first edition of the Master in High Performance Computing (MHPC) held at SISSA/ICTP last year (and who still have to finish their dissertations) are already starting to work in the field. Now it is time to select candidates for the 2015-2016 academic year: the master’s course has in fact just opened applications, which should be made online at http://www.mhpc.it/apply and will remain open until 6 July 2015.

Even this year, among hundreds of applicants (we’ve already reached 130 in only a few days) the school will select a group of high-profile students to train them with outstanding experts from the academic world and leading international companies (like INTEL and NVIDIA), and then place them in this highly promising field. The novelty this year is that two prizes will be awarded. One will be given to the candidate with the best bachelor’s degree dissertation (the prize will cover the course fees). The second award will be given after completion of the master’s course to the best
dissertation, and will cover the costs of attendance at an important international conference in the field of supercomputing.

Supercomputing is a fundamental tool for modern science: at SISSA, for example, it has enabled researchers to study the new nanomaterials by using quantum simulations or to simulate the structure of the primordial universe. In addition to being used in basic research, supercomputing has also several technological applications: it can help to design the hull of a cruise ship and subject it to a series of tests before actually building it, so as to uncover in advance any structural faults that would undermine its efficiency and safety. But it can also be used to produce special effects for the cinema, which would otherwise be impossible, or forecast the weather for the next few days with greater precision. And it can do a lot more: that of High Performance Computing (HPC) is an expanding field that is unaffected by crises and that offers excellent occupational and professional prospects, and the MHPC is the master’s course that trains the future professionals of this field.

The MHPC is organized by two centres of excellence in the international scene, the International School for Advanced Studies (SISSA) of Trieste and the International Centre for Theoretical Physics Abdus Salam (ICTP) of Trieste which guarantee its top-level quality and international value. The excellence of the Master’s course is confirmed by the teaching faculty, all experts from the academic world or from leading international companies such as INTEL and NDVIDIA, and the use of teaching methods that give priority to practical aspects, encouraging students to tackle real professional problems and activities through hands-on work. The first edition, which has just ended, was a success, and this is confirmed by the fact that a vast majority of students are now working on their dissertations with the financial support of industry and research institutes.

Like last year, there will be scholarships covering most of the places available and, new this year, there will be two important prizes. One prize is for the successful applicant with the best bachelor’s degree dissertation (assessed by an internal board) and will cover the course fees. The other prize, to be awarded after the end of the academic year, is for the best master’s dissertation and will allow the winning student to attend an international conference among the most important in the field of HPC.

USEFUL LINKS:

• Webpage for online applications for the MHPC: http://www.mhpc.it/apply