# Master in High Performance Computing



Advanced research in many different fields, such as applied mathematics, theoretical physics but also biotechnology and molecular biology, requires access to **large scientific computing resources**, as well as specialists formed in the field of HPC.

The Master in HPC, aware of the severe shortage of skilled personnel able to bridge the existing gap between the dynamic environment in IT and research, aims to create a group of experts who have the training and the skills needed to fill this gap.

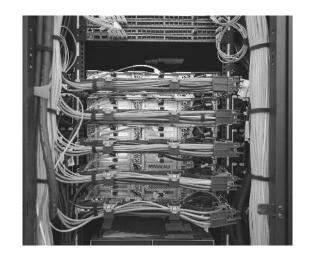
### **MHPC**

The Master in High Performance Computing, ready for its 8th edition, is an innovative specialization program that prepares students for exciting careers in the fast-growing field of high performance computing (HPC), both in academia and industry.

MHPC is set in the stimulating research environment of its co-organizing institutions: **SISSA** (International School for Advanced Studies) and **ICTP** (International Centre for Theoretical Physics), in the city of Trieste.

During the **12-month-program**, students follow courses taught by **international lecturers** from academia and the industrial world, covering the latest applications of HPC technologies and innovations.

The MHPC provides access to **instant career opportunities on an international scale**. A high level of job placement is one of the MHPC's strengths.







The MHPC's strong connection with industry and reputed academic environment highly provides MHPC graduates a unique chance to find the right place in the high technology market or academia. Thanks to this connection, most MHPC students receive a scholarship to support them during their studies.

The deadline for applications is 9 July 2021 (11:59 a.m.).

# **STUDENTS**

Our alumni testify that this specialization course opens doors to academia as well as to industry and consulting companies. Data from the first six editions confirm this trend, as almost all alumni found a job in the field of HPC within 12 months of completing their training, 66% in academia and 34% in companies.

The course is kept in **English** and lessons are organized in full-day programs which include active lectures during the morning and practice hands-on tutorials during the afternoon.

## AFTER MHPC

Students follow a unique training path, and the projects they will be able to carry out are numerous, including:

- implementation of machine learning algorithms for industrial applications that work in real-time,
- analysis of big data using modern machine learning techniques,
- optimisation and parallelisation of existing codes,
- development of HPC libraries,
- development of digital-twin for the transition to Industry 4.0, etc.

In short, wherever high-performance computing is needed, our students excel.







#### MHPC





