



CSCS

Centro Svizzero di Calcolo Scientifico
Swiss National Supercomputing Centre

Università
della
Svizzera
italiana

Summer School 2021

Effective High-Performance Computing & Data Analytics with GPUs

July 19 - 30, 2021

The **Swiss National Supercomputing Centre** and **Università della Svizzera italiana** are pleased to announce that the annual Summer School will be held as an **online course from July 19 to July 30, 2021**.

This summer school will focus on the effective exploitation of state-of-the-art hybrid High-Performance Computing (HPC) systems with a special focus on Data Analytics.

The following topics will be covered:

- GPU architectures
- GPU programming (CUDA and OpenACC)
- Performance optimization and scientific libraries (Kokkos)
- Interactive supercomputing (JupyterLab)
- Python HPC libraries (Numpy/SciPy/Dask/Numba)
- Introduction to Machine Learning and GPU optimized frameworks (Rapids)
- Deep Learning on HPC platforms (TensorFlow)

Students will be able to earn **six ECT credit points** for this course from Università della Svizzera italiana (subject to online exam).

The content of the course is tailored for **3rd year Bachelor's students, Master's students, Ph.D students, and early stage Postdocs** interested in learning parallel programming models and having hands-on experience using HPC systems.

For additional information, application and fees: www.cscs.ch/events

Deadline for application: **Sunday, April 25, 2021**

