UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

SYLLABUS DEL CORSO

Scientific Computing With Python

2425-1-113R-09

Titolo

Scientific Computing with Python

Docente(i)

Davide Gerosa

Lingua

English

Breve descrizione

The python programming language and its library ecosystem are essential tools in modern science. This class provides an advanced introduction to python and its main functionalities, focusing in particular on its applications to computational physics. Targeted topics include: array vectorization with numpy, pretty plotting with matplotlib, scientific recipes with scipy, just-in-time compilating with numba, module packaging, and unit testing. I will also introduce other essential computational tools, notably Mathematica for symbolic manipulation and git for version control. The format will be highly interactive and tailored to the research interests of the participants.

CFU / Ore

2 CFU - 16 hours

Periodo di erogazione

First semester

Sustainable Development Goals

IMPRESE, INNOVAZIONE E INFRASTRUTTURE