Second Computational and Data Science school for HEP (CoDaS-HEP 2018)

Contribution ID: 28

Type: not specified

Low-level Python

Thursday 26 July 2018 13:30 (1h 30m)

Python is a high-level language that usually hides "bare metal" details from the user. This is desirable in organizing a complex workflow, but it can get in the way of performance or interfacing with C/C++ code.

This tutorial will demonstrate how to "jailbreak" your Python for low-level computing. It will include Numpy tricks, memory mapped files, mixing C++ and Python through Cython, GPU programming through PyCUDA, and accessing ROOT functions from Python without loss of performance.

Presenter: PIVARSKI, Jim (Princeton University)