

# Advanced software programming for astrophysics and astroparticle physics



**Tuesday, June 6, 2017 - Friday, June 9, 2017**

**LAPP**

## Programme

The programme of the school is based on **three blocks** of topics, where each one is separated in **lectures** and parallel **hands-on** sessions. **Python** will be the language of reference during the school.

Block 1: **efficient code writing**

Good code practice, traps to avoid

Project management/organisation, continuous integration

Profiling & debugging

Block 2: **parallel & GPU programming for Python**

Learn how to accelerate your code to be executed on several CPUs or on GPU cards

Hands-on sessions to do it with real exercise in physics problematics

Block 3: **Python libraries for astronomy & astrophysics**

Learn about libraries such as numpy, pandas, astropy, pyVO, ...

On the last day of the school will take place a **keynote lecture** on a general interest subject related to the school thematic!