

# ESCAPE SUMMER SCHOOL



**lundi 7 juin 2021 - vendredi 18 juin 2021**

**LAPP**

## Scientific Program

## **Introduction to machine learning**

Come and discover what's hiding behind the buzzword and develop your first analysis using machine learning algorithms, from basic ones to neural networks.

## **Coding environment, tools and good code practice**

Learn how to setup your scientific environment and the good practice using anaconda.

## **Version control, collaborative and continuous development and integration**

In this section, we will learn how to use git and GitHub for collaborative developments, see what unit tests are and why they are important in your continuous development and integration process, how to package your library and manage it efficiently with version control.

## **Profiling, debugging and optimising**

Still debugging using prints? This course is for you.

Learn how to debug your code efficiently, then profile it to find the computing bottlenecks and finally optimise the important bits.

## **Scientific Python libraries**

In this section, we will see many different libraries that are the building blocks of scientific analysis in Python in astronomy, astroparticle and particle physics.