Schedule of the course

Programming Concepts in Scientific Programming

EPFL, Master class

September 20, 2017

Program by day

- Friday 22-th Sep:
  - Presentation of the class
  - What is a program ?
  - Compilation process
  - Exercises: on Linux and manual compilation
- Monday 25-th Sep: Using GIT and CLion: Chapter 2 - Flow control
- Friday 29-th Sep: Exercises on Chapter 2
- Monday 02-th Oct: GDB + Chapter 3 - File Input and Output
- Friday 06-th Oct: Exercises GDB and Chapter 3

Program by day

- Monday 09-th Oct: Chapter 4: pointers - Redo-Presentation about memory contiguity (animation) + class
- Friday 13-th Oct: Chapter 4 exercises
- Monday 16-th Oct: Chapter 5: blocks functions and reference variables + start exercises
- Friday 20-th Oct: Chapter 5: exercises
- Monday 23-th Oct: Chapter 6: An introduction to classes: Presentation about code organization and interface (animation) + exercises
- Friday 27-th Oct: Chapter 6: exercises
- Monday 30-th Oct: Chapter 7: Inheritance and derived classes: Animation about code reuse
- Friday 03-th Nov: Chapter 7: exercises
- Monday 06-th Nov: Chapter 8: classes of Templates
- Friday 10-th Nov: Chapter 8: exercises
- Monday 13-th Nov: Chapter 9: Errors and exceptions + exercises

Program by day

- Friday 17-th Nov: Chapter 9: exercises
- Monday 20-th Nov: Chapter 10 & 12: Developing classes for linear algebra calculations + Designing object-oriented numerical libraries
- Friday 24-th Nov: Chapter 10 & 12: exercises
- Monday 27-th Nov: CMake, Doxygen and Assignment of the projects and start of the development
- Friday 01-th Dec: Session dedicated to work on the projects
- Monday 04-th Dec: Session dedicated to work on the projects
- Friday 08-th Dec: Session dedicated to work on the projects
- Monday 11-th Dec: Session dedicated to work on the projects
- Friday 15-th Dec: Deadline for projects