SP4E 2018 - Class plan description

- Tuesday 18-th Sep: Introduction, GIT, python hello world
- Tuesday 25-th Sep: C++ hello world, floating point numbers, pi computation
- Tuesday 02-th Oct: C++ STL, Coding convention (C++11)
- Tuesday 09-th Oct: Paraview, Numpy&Scipy, Matplotlib, Exercise: conjugate gradient (**Homework**)

- Tuesday 16-th Oct: Object oriented with python
- Tuesday 23-th Oct: Object oriented with C++ (**Homework**)
- Tuesday 30-th Oct: Interactive session to design Particle's code, Design patterns, Implementation of simple kepler orbit
- Tuesday 06-th Nov: Continuing adimentional kepler's orbit

- Tuesday 13-th Nov: Google test. Exercise Produce a test suite for particle's code
- Tuesday 20-th Nov: Code optimization and Templates + pingpong ball. (**Homework**)
- Tuesday 27-th Nov: Homework about trajectory optimization (**Homework**)

- Tuesday 04-th Dec: Using external libraries. Exercise with FFTW (porting to C++)
- Tuesday 11-th Dec: Template library: Eigen. Exercise: mass-spring equilibrium
- Tuesday 18-th Dec: PyBind+cppimport. Exercise porting the particle's code to python