

Prof. Marco Picasso Mathematics Institute of Computational Science and Engineering - MATHICSE

SEMINAR OF NUMERICAL ANALYSIS

WEDNESDAY 22 APRIL 2015 - ROOM INF 119 - 16h15

Prof. Georges-Henri COTTET (Laboratoire Jean Kunzmann, Grenoble) will present a seminar entitled:

"Turbulent transport: the interplay of Physics, Mathematics and High Performance Computing"

Abstract:

In this talk we address numerical issues related to turbulent transport. Turbulent transport relates to a class of problems where one needs to solve small scales, beyond the usual Kolmogorov scales that classical govern turbulent flows. Applications go from passive transport of level sets to active transport in reactive flows.

We show how numerical models and algorithms can be tailored, though hybrid computing, to modern HPC platforms to address these multiscale problems.

Lausanne, 7 April 2015/MP/cr