

B. Buffoni – B. Dacorogna – J. Krieger – M. Nguyêñ – Section Mathématiques

SEMINAIRE D'ANALYSE

➤ **VENDREDI 24 FEVRIER 2017 à 14h15 - salle MA A3 31**



Professeur Jean-Pierre PUEL (Université de Versailles, FR) donnera une conférence sur le thème:

« Controllability of fluid flows »

Abstract: This presentation will give an overview on the controllability for fluid flows. There will be no technical proof.

First of all we will describe in an abstract situation the various concepts of controllability for evolution equations.

We will then present some problems and results concerning the controllability of systems modeling fluid flows.

First of all we will consider the Euler equation describing the motion of an incompressible inviscid fluid.

Then we will give some results concerning the Navier-Stokes equations, modeling an incompressible viscous fluid, and some related systems, in particular the case of what is called Lagrangian control and which might lead to a lot of developments.

Finally, we will present a first result of controllability for the case of a compressible fluid (in dimension 1) and some important open problems.

Lausanne, le 20 février 2017

BD/HMN/MM