

B. Buffoni – B. Dacorogna – J. Krieger - H.M Nguyen - Section Mathématiques

SEMINAIRE D'ANALYSE

➤ **VENDREDI 9 JANVIER 2015 à 15h15 - salle MA A112**

Professeur **ALDO PRATELLI** (Universität Erlangen-Nürnberg, Allemagne) donnera une conférence sur le thème:

«On some non-trivial approximation questions»

We will discuss some questions about approximation of functions which are very simple to state but hard to solve. Basically, we will see that the standard approximation techniques (for instance, mollification with a smoothing kernel) do not work if we want to approximate homeomorphisms with other homeomorphisms, because the injectivity can be lost. We will first briefly describe a one-dimensional problem, then the main two-dimensional one; in particular, the latter has been proposed more than 30 years ago by Ball and Evans, and it would be fundamental to deal with more success with problems in nonlinear elasticity. We will present some recent positive answers, even though, the completely general problem is still open. (Joint works with S. Daneri, S. Hencl, E. Radici).

Lausanne, le 26 janvier 2015
BD/vl

Les séminaires qui ont lieu à la Section de Mathématiques sont annoncés sur Internet
<http://memento.epfl.ch/math/>