Institut d'Analyse et Calcul Scientifique (IACS)
Section Mathématiques

SEMINAIRE D'ANALYSE

➢ *VENDREDI 20 février 2008 à 16h15 à la salle MA A331*

*Monsieur **Norbert HUNGERBUEHLER** (Université de Fribourg, Suisse)* donnera une conférence sur le thème:

"YOUNG MEASURES AND HEAT FLOW PROBLEMS"

Let M and N be compact smooth Riemannian manifolds without boundaries. Then, for a map $u : M \to N$ we consider a class of energies which includes the the popular Dirichlet energy and the more general p-energy. Geometric or physical questions motivate to investigate the critical points of such an energy or the corresponding heat flow problem. In the case of the Dirichlet energy, the heat flow problem has been intensively studied and is well understood by now. However, it has turned out that the case of the p-energy ($p \neq 2$) is much more difficult in many respects. We give a survey of the known results for the p-harmonic flow and indicate how these results can be extended to a larger class of energy types by using Young measure techniques which have been developed for stationary problems in recent years.

Lausanne, le 23 janvier 2009
BD/VL