ÉCOLE POLYTECHNIQUE
FÉDÉRALE DE LAUSANNE

Section Mathématiques

SEMINAIRE D'ANALYSE

➢ *LUNDI 14 juin 2010 à 15h15 à la salle MA A330*

*Monsieur **Frédéric ROUSSET** (Université de Rennes, France)* donnera une conférence sur le thème:

"TRANSVERSE INSTABILITY OF SOLITARY WAVES"

We shall study the stability properties of one-dimensional solitary waves with respect to general two-dimensional perturbations in Hamiltonian PDE's.

In the first part of the talk, we shall present a simple criterion ensuring the transverse instability at the linear level and discuss it on various examples.

In the second part, we shall explain how the nonlinear instability of the waves can be proven with a special emphasis on the example of capillary gravity waves.

Lausanne, le 7 mai 2010
BD/BB/VL

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