



ÉCOLE POLYTECHNIQUE  
FÉDÉRALE DE LAUSANNE

*Section Mathématiques*

**SEMINAIRE D'ANALYSE**

➤ **VENDREDI 10 décembre 2010 à 15h15 à la salle MA A112**

*Monsieur Adrian CONSTANTIN (Université de Vienne, Autriche)* donnera une conférence sur le thème:

**"ANALYTICITY OF THE STREAMLINES FOR PERIODIC TRAVELING  
FREE SURFACE WATER WAVES WITH VORTICITY"**

The streamlines of periodic irrotational traveling water waves are known to be real-analytic, with exception of the free surface in the case the wave of greatest height which has a corner at the wave crest (the lateral tangents being at an angle of  $2\pi/3$ ).

The regularity of waves of small and moderate amplitude is, perhaps surprisingly, little affected by the presence of vorticity in the flow. This is joint work with J. Escher.

Lausanne, le 16 novembre 2010  
BB/BD/JK/nk

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Les séminaires qui ont lieu à la Section de Mathématiques sont annoncés sur Internet (<http://memento.epfl.ch/cgi-bin/memento/select?memento=MATHS>)