INVITATION

Le laboratoire EFLUM a le plaisir de vous inviter à la conférence suivante :

Salle de conférence GR C2 21 (2ème étage, Bât. GR)

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mercredi 2 avril 2008 à 12h15

LARGE SCALE FLOW STRUCTURES
AND MIXING PROCESSES IN SHALLOW FLOWS

by

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ABSTRACT: Shallow turbulent flows occurring in wide rivers, estuaries, lakes or coastal regions, as well as the atmosphere, are readily susceptible to transverse disturbances that lead to two-dimensional coherent structures. The shallow jet, the shallow wake and the shallow mixing layers are examples of such flow patterns. Three types of generation mechanisms are proposed for these flows. The large-scale coherent structures greatly influence the mixing and transport of pollutants that are released into such flows. They may also play a crucial role in transverse momentum exchange that controls friction in wide channel flows. The results of laboratory experiments, numerical simulations and instability analyses give insight into the dynamics of these flows.