

ESPCI Laboratoire PMMH 10 rue Vauquelin, 75231 Paris Cedex 05



Séminaire PMMH

Amphithéâtre Langevin (A4), Escalier N, 2 ^{ème} Etage Vendredi 8 décembre 2017, 11h00-12h00

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Experimental exploration of Hydrodynamics Turbulence in inhomogeneous and un-stationnary configurations

Hydrodynamics Turbulence have been the subject of a recent renewal in out of equilibrium situations, ie when injection and dissipation are not locally balanced. It can be for instance the case in temporally decaying Turbulence or spatially inhomogeneous flows. Down in the laboratory of W.T.M. Irvine at University of Chicago, I sought experimental situations to study those regimes. I will show how our research path made us identify scientific question in out of equilibrium Turbulence that can be adressed in reasonnable laboratory set up.

I will eventually link these explorations to my current research topic on the interaction between hydrodynamics Turbulence and deformable boundaries in the context of two phase flow Turbulence (with L. Deike, Princeton University) and generation of waves by the wind (with F. Moisy, M. Rabaud and M. Benzaquen, Paris-Sud University and Ecole Polytechnique).