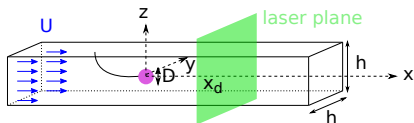


Low frequency oscillation past a sphere or a cube

Benoît Semin¹, Guy-Jean-Michon², José Eduardo Wesfreid¹

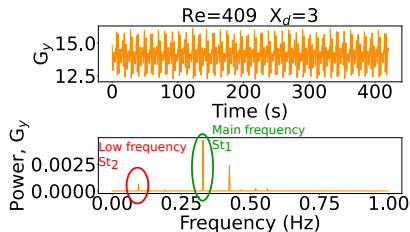
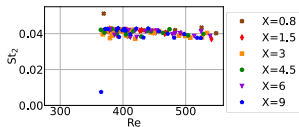
1 : PMMH, CNRS, ESPCI Paris, PSL, Sorbonne Université, Université Paris Cité

2 : Institut Jean-le Rond d'Alembert, CNRS, Sorbonne Université

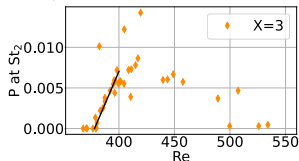


Water channel

$h = 100$ mm, sphere $D = 14$ mm,



$St_1/St_2 \sim 0.3$ noncommensurable



⇒ Secondary supercritical Hopf bifurcation (Neimark-Sacker)