Ángel Castro (ICMAT)

Title: Traveling waves near shear flows.

Abstract: In this talk we will consider the existence of traveling waves arbitrarily close to shear flows for the 2D incompressible Euler equations.

In particular we shall present some results concerning the existence of such solutions near the Couette, Taylor-Couette and the Poiseuille flows. In the first part of the talk we will introduce the problem and review some well known results on this topic. In the second one some of the ideas behind the construction of our traveling waves will be sketched.