

Speaker: **Isabelle Gallagher** (Université Paris Cité)

Title: *An introduction to boundary layers*

Summary : The aim of this mini-course is to present, around an example, some aspects of the study of boundary layers. We will base the analysis on the example of the Navier-Stokes equations for rapidly rotating fluids with vanishing viscosity, lying between two horizontal plates. We will introduce the concept of boundary layer, how to determine its size, and how to obtain the asymptotic behaviour of the solution as the sum of an interior profile and a boundary layer (in a linear setting first).