

# On the hydrostatic limit of the Euler-Boussinesq equations

*mercredi 20 mars 2024 17:20 (30 minutes)*

I will talk about the hydrostatic approximation of the 2d Euler-Boussinesq system, describing the evolution of an inviscid stratified fluid where the vertical length scale is much smaller than the horizontal one. Even though of importance in oceanography, the justification of the hydrostatic limit in this context has remained an open problem. I will discuss some recent results showing that some instability mechanisms may prevent this limit to hold.

This is joint work with R. Bianchini (CNR Rome) and M. Coti Zelati (Imperial College London).

**Orateur:** ERTZBISCHOFF, Lucas