



## ANALISYS SESSION

### On the solvability with borderline regularity for the 2D inviscid Boussinesq equations.

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14h - 14h40  
Anfiteatro 11

#### Abstract.

We are concerned with the long-time solvability for 2D inviscid Boussinesq equations for a larger class of initial data which covers the case of borderline regularity. First we show the local solvability in Besov spaces uniformly with respect to a parameter  $\kappa$  associated with the stratification of the fluid. Afterwards, employing a blow-up criterion and Strichartz-type estimates, the long-time solvability is obtained for large  $\kappa$  regardless of the size of initial data.

Joint work with Prof. Vladimir Angulo-Castillo (UNAL, Colombia) and Prof. L. Kosloff (Unicamp, Brazil).

**AMS MSC:** 35Q35; 76B03; 76U05; 35A01; 46E35

**Key:** Boussinesq equations; Convection problem; Long-time solvability; Dispersive effects; Besov spaces; Borderline regularity

## References

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