Longtime Dynamics for 2D Boussinesque System with Fractional Dissipation

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Abstract:

2D Boussinesque equations make up an important system modeling geophysical fluid motions. Mathematically, this system for incompressible fluid flows is an interesting one possessing some of the essential properties of the well know Navier-Stokes equations, while at the same time reflecting its own special properties. In the talk, the long time dynamical behavier of the solutions of this system especailly under low fractional dissipation will be disccussed in details.