


复旦大学数学科学学院

数学综合报告会

午间学术报告会（一百九十九）

报告题目：On the stabilizing effect of rotation in incompressible flows

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报告时间：2026-04-03 星期五 12:00-13:00

报告地点：光华东主楼 2201

摘要：

The Coriolis force induces a dispersive mechanism in 3D incompressible fluids (inertial waves),which is strongly anisotropic and degenerate. In this talk, we present the global well-posedness and scattering results for the Euler-Coriolis system. Equivalently, we show the global stability of the uniformly rotating solution to the pure Euler equations. We will introduce a precise upper bound for the linear dispersion, the nonlinear null structures, the techniques involved in the proof of global stability, as well as a result on the convergence of Lagrangian coordinates. Based on joint work with Prof. Gang Tian.

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