

Dissipation concentration

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As part of an ongoing study with J. Park (Yonsei University, Seoul), we give several constraints on the dissipation measure arising in the inviscid limit of two-dimensional incompressible fluids under minimal assumptions on the initial datum. None of them is replicable in three dimensions, highlighting the non-trivial effect of the higher order conserved quantity, or "double cascade", even in regularity settings where it shouldn't be that effective.