

# Boundary vorticity estimate for the Navier-Stokes equation and control of the layer separation in the inviscid limit

Alexis F. Vasseur

The University of Texas at Austin  
VASSEUR@MATH.UTEXAS.EDU

## Abstract

We provide a new boundary estimate on the vorticity for the incompressible Navier-Stokes equation endowed with no-slip boundary condition. The estimate is rescalable through the inviscid limit. It provides a control on the layer separation at the inviscid Kato double limit, which is consistent with the Layer separation predictions via convex integration.