

Luan Hoang, University of Minnesota

On the Stokes and Laplacian operators in Navier-Stokes equations

ABSTRACT:

We show that the Stokes operator related to the Navier boundary condition is a "small" perturbation of the minus Laplacian. The result is applied to the study of the global existence of regular solutions to the 3D Navier-Stokes equations in thin domains.