Milton C. Lopes Filho, UniCamp, Campinas, Brazil, Anna L. Mazzucato*, Department of Mathematics, Pennsylvania State University, McAllister Building, University Park, PA 16802, Helena J. Nussenzveig Lopes, UniCamp, Campinas, Brazil, and Michael E. Taylor, UNC-Chapel Hill. Vanishing viscosity limit in boundary-driven 2D flows.

We discuss convergence of Navier-Stokes solutions to Euler solutions in the limit of vanishing viscosity and the behavior in the boundary layer for special classes of 2D and almost 2D flows driven by a moving boundary. In particular, we consider planar radial flow in a cylinder and plane parallel flow in a channel. We allow for very rough boundary velocities. (Received July 27, 2007)