1096-35-275 Zachary Bradshaw* (zb8br@virginia.edu). On the radius of analyticity of solutions to the 3D Navier-Stokes equations at interior points of a bounded domain.

Sharp lower bounds are given for the radius of analyticity of the complex extensions of the 3D Navier-Stokes equations defined on a domain possessing a boundary. Specifically, for a fixed interior point, the analyticity radius is increasing (locally) in time in a fashion depending on the distance from the point to the boundary, as well as the initial data and the boundary pressure data. A geometric measure-type regularity criteria for bounded domains is included as an application of our work. (Received August 26, 2013)