1078-35-409 Walter Rusin* (wrusin@usc.edu). On regularity of solutions to the 3D Navier Stokes equations oscillating in one direction.

We consider the three dimensional Navier-Stokes equations in an unbounded domain which is periodic in the third direction. In this talk we give a set of conditions on various quantities derived from the initial data, that, if satisfied, lead to global, regular solutions. (Received December 13, 2011)