1011-76-75Susan Friedlander* (susan@math.uic.edu), Dept of Math (M/C 249), 851 S.Morgan Street,
Chicago, IL 60607. Nonlinear Instability for the Navier-Stokes Equations.

We prove, using a bootstrap argument, that linear instability implies nonlinear instability for the incompressible Navier-Stokes equations in L^p , p > 1 and any spatial dimension. This is joint work with Roman Shvydkoy and Natasa Pavlovic. (Received August 14, 2005)