1038-35-328 **Igor Kukavica**^{*} (kukavica@usc.edu). On the partial regularity for solutions of the Navier-Stokes system.

A classical result of Caffarelli, Kohn, and Nirenberg states that the one dimensional Hausdorff measure of singularities of a suitable weak solution of the Navier-Stokes system is zero if the force belongs to the space $L^{5/2+q}$ where q > 0 is arbitrary. We present a shorter proof of the partial regularity result which requires the force to belong only to $L^{5/3}$. (Received February 12, 2008)