Igor Kukavica* (kukavica@usc.edu), Vlad Vicol and Fei Wang. On the inviscid limit for the Navier-Stokes equations.

We address the inviscid limit problem for the Navier-Stokes equations in a half space, with initial datum that is analytic only close to the boundary of the domain, and has finite Sobolev regularity in the complement. We prove that for such data the solution of the Navier-Stokes equations converges in the vanishing viscosity limit to the solution of the Euler equation, on a constant time interval. The result is joint with Vlad Vicol and Fei Wang. (Received September 02, 2019)