1107-35-325 M. Ignatova* (ignatova@math.princeton.edu) and V. Vicol. Almost global existence for the Prandtl boundary layer equations with small tangentially analytic initial datum.

We address the Prandtl boundary layer equations on the half space with real-analytic initial datum with respect to the tangential variable. The boundary traces of the horizontal Euler flow and pressure are taken to be constants. We establish that if the initial datum is of size ϵ , then the time of existence for the solution is $\exp(\epsilon^{-1/2})$. This is a joint work with V. Vicol. (Received January 18, 2015)