1092-76-76 Michael Renardy\* (mrenardy@math.vt.edu), Department of Mathematics, 225 Stanger St, Blacksburg, VA 24061-0123. Prandtl boundary layers in viscoelastic fluids.

We study the well-posedness of the Prandtl boundary layer equations for the upper convected Maxwell fluid, as well as the Phan-Thien Tanner and Giesekus fluids. Rather remarkably, it turns out that proving well-posedness is easier when elastic effects are important than it is for the Newtonian case. (Received July 29, 2013)