1126-35-280 **Marcelo Mendes Disconzi*** (`marcelo.disconzi@vanderbilt.edu`), 1326 Stevenson Center, Nashville, TN 37240, and **Igor Kukavica**. *A priori estimates for the free-boudary Euler equations with surface tension in three dimensions.*

We derive a priori estiamtes for the incompressible free-boundary Euler equations in three spatial dimensions with surface tension. We work in Lagrangian coordinates. Our methods are reather direct and involve three key elements: good estimates for the pressure, the boundary regularity provided by the mean curvature, and the Cauchy invariance. (Received January 16, 2017)