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**Marcelo Mendes Disconzi\*** ([marcelo.disconzi@vanderbilt.edu](mailto:marcelo.disconzi@vanderbilt.edu)), 1326 Stevenson Center, Nashville, TN 37240, and **Igor Kukavica** ([kukavica@usc.edu](mailto:kukavica@usc.edu)), 3620 S. Vermont Avenue, Los Angeles, CA 90089-2532. *The three-dimensional free-boundary Euler equations with surface tension.*

We derive a priori estimates for the incompressible free-boundary Euler equations in three spatial dimensions with surface tension. We work in Lagrangian coordinates. Our methods are rather direct and involve three key elements: good estimates for the pressure, the boundary regularity provided by the mean curvature, and the Cauchy invariance. We shall also briefly discuss a generalization of these results for the compressible case. (Received March 06, 2017)