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*Filtered Fourier method for Euler drops under a conformal mapping formulation.*

The Euler equations for a drop without gravity are closely related to optimal transformation. We then find a conformal mapping formulation for them. The filtered-Fourier method is developed for this formulation. The stability and convergence for small perturbation is proved with surface tension being present. Several numerical examples have been performed to verify our analysis. (Received September 11, 2016)