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**The Floating and Sinking of Small Interfacial Objects** DOMINIC VELLA, ROBERT WHITTAKER, Institute of Theoretical Geophysics, DAMTP, University of Cambridge, UK, PAUL METCALFE, DAMTP, University of Cambridge, UK — Small objects are able to float at a liquid–gas interface even if their density exceeds that of the bulk fluid because of the vertical force contribution of surface tension. If this force is reduced, for example by eliminating a portion of the meniscus through contact with another object, such objects may no longer be supported at the interface and sink. We discuss the conditions under which floating can occur as well as some simple models for the early stages of sinking, which compare favourably to experiments.

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