

Abstract Submitted
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Antibubble dynamics: slipping or viscous interfaces? BENOIT SCHEID, Université Libre de Bruxelles, STÉPHANE DORBOLO, Université de Liège — An antibubble is a spherical thin air shell that is immersed in a surfactant mixture and drains under the action of hydrostatic pressure. Two lubrication models are proposed that account for either slipping or shear viscosity at the shell interfaces. Numerical solutions show that the antibubble lifetime decreases with increasing slip length or decreasing surface shear viscosity. Comparison with available experimental data is provided and gives some hints to discriminate between the slip and the surface viscous models, though a correspondence between these models is also established.

Benoit Scheid
Université Libre de Bruxelles

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