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**Foam flow and liquid films motion: role of the surfactants properties**[1]

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Liquid foams absorb energy in a much more efficient way than each of its constituents, taken separately. However, the local process at the origin of the energy dissipation is not entirely elucidated yet, and several models may apply, thus making worth local studies on simpler systems. We investigate the motion through a wet tube of transverse soap films, or lamellae, combining local thickness and velocity measurements in the wetting film. For foaming solution with a high dilatational surface modulus, we reveal a zone of several centimeters in length, the dynamic wetting film, which is significantly influenced by a moving lamella. The dependence of this influence length on lamella velocity and wetting film thickness provides an accurate discrimination among several possible surfactants models.

[1]In collaboration with B. Dollet