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Linear shear of quasi-2D foams GIJS KATGERT, MATTHIAS MOE-BIUS, MARTIN VAN HECKE, Leiden University — We study foam rheology in a quasi-2-dimensional geometry in which a singly layer of foam bubbles is confined between the surface of a soapy solution and a glass plate. In this geometry the foam flow exhibits shear banding down to very low driving rates. In our experiment the foam is sheared linearly and the influence of packing fraction, bubble size and bubble size dispersity on the shape of the shearbanded flow profiles is investigated. Individual bubble motions are also tracked in order to investigate the fluctuations in the flow.

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