

Abstract Submitted
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Plateau border adjustment in non-equilibrium foams¹ MICHAEL GRATTON, STEPHEN H. DAVIS, Northwestern University — For foams without surfactants, changes occur in the Plateau border regions at the corner of nearly-polygonal bubbles three orders of magnitude faster than the thinning of lamellas. We describe the relaxation of an asymmetric Plateau border to symmetry in a two dimensional foam and compare the results to the Stoker-Hosoi hyperbolic coordinate theory for arid foams. These results are used to write a lumped-element model to describe the moderate timescale evolution of a foam, away from the time of lamella rupture, but slower than the timescale of local Plateau border adjustment.

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