

Abstract Submitted  
for the DFD17 Meeting of  
The American Physical Society

**Dynamics of poroelastocapillary rise** BABAK NASOURI, GWYNN ELFRING, University of British Columbia — The surface-tension-driven rise of a liquid between two elastic sheets can result in their deformation or coalescence depending on their flexibility. When the sheets are poroelastic, the flexibility of the immersed parts of the sheets can change considerably thereby altering the dynamical behavior of the system. To better understand this phenomenon, we study the poroelastocapillary rise of a wetting liquid between poroelastic sheets. Using the lubrication theory and linear elasticity, we quantify the effects of the change in material properties of the wet sheets on the capillary rise and the equilibrium state of the system.

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Date submitted: 26 Jul 2017

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