

Abstract Submitted  
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**The Effect of Surface Topography on Interface Stresses During Peeling** YE XU, ERIC DUFRESNE, Yale University — Surface topography can have a large impact on the adhesive strength of soft interfaces. While previous experiments have revealed some of the underlying mechanisms, there has been no direct measurement of interface stresses during adhesive failure. We use traction force microscopy to measure the microscopic distribution of interface stresses during peeling. We focus on the relationship between local stresses and topography near the peeling front.

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