

Abstract Submitted
for the MAR13 Meeting of
The American Physical Society

Crack propagation on curved surfaces MELISSA FENDER, University of Chicago, VINZENZ KONING, VINCENZO VITELLI, Leiden University, WILLIAM T.M. IRVINE, University of Chicago — We investigate the propagation of cracks on curved surfaces. Using a stretched elastic sheet situated at a fluid interface, we generate a surface with spatially varying curvature and observe the trajectory and dynamics of an induced crack. We interpret the results from our experiments using a combination of numerical simulation and analytical considerations.

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Date submitted: 20 Nov 2012

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