

PHYSICAL MATHEMATICS SEMINAR

Tearing: when fracture follows geometry

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ABSTRACT:

Can we predict the path of a crack, and the shapes of pieces when something breaks? This is a difficult question in general. But we will see on two experiments leading to oscillating and spiraling crack patterns, that when it comes to thin sheets, tearing can be very reproducible. In fact we show that crack propagation follows very simple geometrical rules that can be deduced from fracture mechanics. I will also try to show that cracks propagation has deep similarities with soap bubbles.



See <http://www.pmmh.espci.fr/%7Ebenoit/fissure/tearing.html>

TUESDAY, SEPTEMBER 23, 2008

2:30 PM

Building 2, Room 105

*Refreshments at 3:30 PM in Building 2, Room 349
(Applied Math Common Room)*



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