Department of Mathematics and Statistics Colloquium

Elastic and plastic deformations of soap bubbles floating at an air-water interface

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Abstract: Aqueous foams are multiphase systems made up of gas bubbles dispersed in soapy water. Like many other complex fluids such as pastes, colloids, emulsions and granular matter, foams display many interesting phenomena such as self-organization, ageing, power-law dynamics, dynamical heterogeneity and a jamming transition characterized by cessation of motion bellow a critical yield stress. The jamming transition in particular suggests that foams may be part of larger class of materials that display glassy dynamics. In this talk I will focus on the interactions of soap bubbles floating at an air-water interface and how they impact the dynamical behavior of 2D foam aggregates.

Monday, November 2 at 3:45 in Roop 103

refreshments at 3:30