

*Department of Mathematics,
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Math 248 - Analysis Seminar

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Limit shapes of Bernoulli-type free boundaries in periodic media

Abstract:

I will discuss some simplified models for the shape of liquid droplets on rough solid surfaces, especially Bernoulli-type free boundary problems. In these models small scale roughness leads to large scale non-uniqueness, hysteresis, and anisotropies. In technical terms we need to understand laminating/foliating families of plane-like solutions, this is related to ideas of Aubry-Mather theory, but, unlike most results in that area, we need to consider local (but not global) energy minimizers.

Tuesday, November 30, 2021

11:00 AM

<https://ucsd.zoom.us/j/99515535778>
