

# **ATOMIC-TO-CONTINUUM DERIVATION IN ELASTICITY WITH INTERFACE ENERGY**

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ABSTRACT. A fundamental question in Continuum Mechanics is how the continuum models can be derived from atomistic ones. In this talk, I will review the Gamma-convergence and the pointwise convergence approaches to atomic-to-continuum derivation in Nonlinear Elasticity. Then, I will present my work based on point wise convergence and show how it predicts elastic energy and interface energy