

Minimizers of anisotropic nonlocal interaction energies

In this talk I will review some recent results about the minimization of a nonlocal interaction energy describing the interaction of edge dislocations in a two-dimensional setting. In this model the interaction kernel is the sum of the two-dimensional Coulomb kernel and an anisotropic term, depending on the direction of the Burgers vector. Starting from this example, I will discuss some related open questions and some more recent results about the role of anisotropy on the dimensionality of minimizers.