

Energy scaling laws for thin elastic sheets with defects

David Padilla-Garza

Hebrew University of Jerusalem

Dislocations and disclinations are material defects caused by a disruption in the periodic lattice structure of its components. At a continuum level, a disclination is modelled by a curvature singularity, while an edge-dislocation is modelled by a curvature dipole. In this talk, we will be interested in thin elastic sheets with dislocations and disclinations. We will formulate and prove energy scaling laws in the vanishing thickness regime.

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