

Sergio Conti: Laminates with variable volume fraction in shape-memory alloys

lundi 19 juin 2023 14:00 (50 minutes)

I will discuss a singularly perturbed variational model for single laminates in shape-memory alloys, with boundary conditions that induce a position-dependent volume fraction. The scaling of the minimum value of the (geometrically linear) energy with respect to the surface energy density is determined by an explicit upper bound and an ansatz-free lower bound, both for a Dirichlet and for a Neumann problem. The lower bound builds upon a rigidity estimate for functions of bounded deformation. This talk is based on joint work with R. V. Kohn and O. Misiats.