

Seminar of the Work Group
Nonlinear Partial Differential Equations
SS 24

June 12th, 2024, 11:30 - 12:30
Seminar room: SR 3.069

Convergence of Equilibria of Thin Elastic Plates in a Discrete Model - the von Kármán Case

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Abstract

We focus on the mathematical rigorous derivation of von-Karman (vK) plate theory from an atomistic model. We look at the convergence of stationary, possibly non-minimizing points of atomistic energy functionals to the vK-functional. In this sense we are able to extend a recent Gamma-convergence result of Braun and Schmidt under additional assumptions on the derivative of the interaction potential. This talk is based on joint work with Bernd Schmidt.