

A Variational Characterization of a Gibbs Measure related to the Aviles-Giga Functional

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The Aviles-Giga functional is one of the most prominent models arising in the variational modelling of pattern formation in materials. It has applications ranging, e.g., from blistering phenomena in thin films to liquid crystals. In this talk, we will discuss a characterization of the associated Gibbs measure in the sense of statistical mechanics. For that, we build on ideas that were developed by N. Barashkov and M. Gubinelli in [1] in the context of the Φ_d^4 model.

References

- [1] N. Barashkov and M. Gubinelli. A variational method for ϕ_3^4 . *Duke Mathematical Journal*, 169(17), November 2020.