

Renormalization group in a fermionic hierarchical model in projective coordinates

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Abstract

We study the renormalization group action in a fermionic hierarchical model in the space of coefficients determining the Grassmann-valued density of the free measure. This space is interpreted as the two-dimensional projective space. The renormalization group map is a homogeneous quadratic map and has a special geometric property that allows describing invariant sets and the global dynamics in the whole space. © 2012 Pleiades Publishing, Ltd.

<http://dx.doi.org/10.1007/s11232-012-0137-z>

Keywords

dynamics, fermionic model, hierarchical lattice, invariant set, projective space, renormalization group