

Functional integral via functional equation

Missarov M.

Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

Discretization of p-adic Grassmann-valued {Mathematical expression}-model leads to a hierarchical model with the Hamiltonian given by a nontrivial functional integral over the Grassmann variables. Using renormalization group arguments, we reduce the calculation of this integral to a functional equation. The problem of the convergence of the perturbation expansion of this integral, realized as a small-divisors problem, is investigated. © 1994 Kluwer Academic Publishers.

<http://dx.doi.org/10.1007/BF00761144>

Keywords

Mathematics Subject Classifications (1991): 82A05, 81T99