

Quantengravitation-Seminar

May 31, 2012 at 10 a.m.
Sozialraum der THEP; Institut für Physik (05-427)

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Complementary Renormalization Group Approaches Applied to Nonlinear Sigma Modéls

We start with an analysis of nonlinear $O(N)$ models by means of FRG computations based on a truncation that includes derivative terms up to fourth order. The critical properties of these models are discussed and compared with results obtained by lattice calculations and the method of Monte Carlo Renormalization Group. Finally, an alternative formulation of the Functional Renormalization Group is presented which describes the flow of an effective Hamiltonian and provides a complementary view on nonlinear models.