

Title: Generalized Henon Renormalization

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Abstract: The combinatorics of unimodal maps can be understood in terms of generalized renormalization schemes. The unimodal context is used to introduce a generalized renormalization scheme for dissipative Henon dynamics. Although, Henon renormalization is the counterpart of unimodal renormalization, it is not a perturbative theory. The introduction of generalized Henon renormalization leads to a topological model, a priori bounds, non-existence of wandering domains, a description of the stable lamination, the ergodic components, and of the boundary of chaos.