John R. Klauder* (john.klauder@gmail.com), Department of Mathematics, University of Florida, P O Box 118105, Gainesville, FL 32611-8105. *Nonrenormalizability Tamed!*

Within a Euclidean-spacetime, lattice-regularized functional integral, a novel and nonclassical counter term acts to eliminate term-by-term divergences in a perturbation analysis of the mass term as well as that of a general nonlinear interaction. The continuum limit of the regularized functional integral expression promises to define a relativistically covariant quantum field theory. (Received August 23, 2008)