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Conformal or Walking? Monte Carlo Renormalization Group studies of technicolor-inspired models

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Models with many fermions or fermions in higher representations can be candidates for extended technicolor or unparticle theories. The phenomenologically most interesting models show "walking" or develop an infrared fixed point in strong gauge coupling. Lattice methods can be used to explore the phase diagram of these models, and Monte Carlo renormalization group (MCRG) methods are especially effective in identifying an infrared fixed point and measuring anomalous dimensions (critical indexes). In this talk I discuss the MCRG method as applied to SU(3) gauge models with many fermion flavors and discuss some new results in the 8, 12 and 16 flavor models.

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