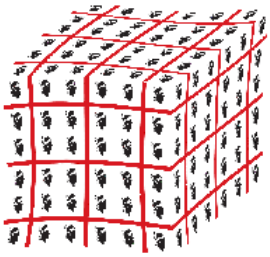

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Flavor dependence of hadron spectrum in Technicolor theories

Thursday, 17 June 2010 14:50 (20 minutes)

An alternative to the Standard Model Higgs mechanism to explain the generation of the W and Z boson masses is to have dynamical electroweak symmetry breaking as a result of some new strong interactions at high energies. Lattice studies of strongly-interacting theories other than QCD can give us important information about the behaviors of such Technicolor theories in a non-perturbative framework. In this talk we present a study of the light hadron spectrum in the SU(3) gauge theory with $N_f = 2$ and 6 flavors of domain wall fermions in the fundamental representation. In particular, we study the chiral behaviors of the pseudoscalar, vector and axial vector mesons, and test the Weinberg's spectral sum rules under the assumption of vector-pole dominance. Preliminary results with $N_f = 10$ will also be presented.

Please, insert your presentation type (talk, poster)

talk

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