The 33rd International Symposium on Lattice Field Theory (Lattice 2015)



Contribution ID: 322

Type: Talk

Running coupling of the sextet composite Higgs model

Tuesday, 14 July 2015 17:30 (20 minutes)

The renormalized running coupling of SU(3) gauge theory coupled to Nf = 2 flavors of massless Dirac fermions in the 2-index-symmetric (sextet) representation is calculated. This model is of particular interest as a minimal realization of the strongly interacting composite Higgs scenario. A recently proposed finite volume gradient flow scheme is used. The calculations are

performed at several lattice spacings and two discretizations allowing for a controlled continuum extrapolation and particular attention is paid to estimating the systematic uncertainties.

Primary author: NOGRADI, Daniel (Eotvos University)

Co-authors: WONG, Chik Him (Wuppertal); Prof. KUTI, Julius (U.C. San Diego); Prof. HOLLAND, Kieran (University of the Pacific); FODOR, Zoltan (Wuppertal); Mr MONDAL, santanu (Eötvös Loránd University)

Presenter: NOGRADI, Daniel (Eotvos University)

Session Classification: Physics Beyond the Standard Model

Track Classification: Physics Beyond the Standard Model