Contribution ID: **390** Type: **Talk**

Running coupling of twelve flavors

Tuesday, July 26, 2016 2:00 PM (20 minutes)

Numerical results are reported on the discrete β-function of $SU(3)$ gauge theory with $N_f = 12$ fundamental fermions in the gradient flow scheme. Controlled continuum extrapolation is performed for $s = 2$ scale change with $c = \sqrt{8t}/L = 0.2$ targeting 3 tuned values of the renormalized coupling, approximately $g^2 = 6.0,\ 6.2$ and 6.4. Contrary to a previous claim, no evidence is found for a zero of the continuum β-function.

Primary author: NOGRADI, Daniel (Eotvos University)

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

Presenter: NOGRADI, Daniel (Eotvos University)

Session Classification: Physics Beyond the Standard Model

Track Classification: Physics Beyond the Standard Model