The XXVIII International Conference on Supersymmetry and Unification of Fundamental Interactions (SUSY 2021)



Contribution ID: 385 Type: not specified

Naural composite Higgs model

Wednesday, 25 August 2021 22:35 (20 minutes)

We present a simple mechanism for generating a Higgs quartic in composite Higgs models without a corresponding quadratic term. The extra quartic will originate from a Higgs dependent kinetic mixing between additional fermionic states. The mechanism can be naturally embedded to models with maximal symmetry as well as Twin Higgs models. The resulting Twin Higgs models will have a fully natural realistic Higgs potential, where the quartic mechanism will serve as the only source for the Z_2 breaking, while the top and gauge sectors can remain exactly Z_2 invariant.

Primary author: MA, Teng

Presenter: MA, Teng

Session Classification: Theories of New Strong Dynamics

Track Classification: Theories of New Strong Dynamics