

New results on the emergent light BSM scalar as 0^{++} sigma-particle or dilaton

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New results are discussed on the effective field theory of the light 0^{++} scalar in an important near-conformal strongly coupled BSM gauge theory and its lattice simulations in the sextet fermion representation. Relevant for the composite BSM Higgs, two distinct scenarios are introduced for the emergent light scalar as the composite σ -particle of chiral symmetry breaking or the dilaton of conformal symmetry breaking. An important new method for the anomalous dimension of the chiral condensate is presented for the cross-validation of dilaton signatures in goldstone dynamics and its extensions.

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