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Viability of strongly-coupled scenarios with a light Higgs-like boson

We present a one-loop calculation of the oblique S and T parameters within strongly-coupled models of electroweak symmetry breaking with a light Higgs-like boson. We use a general effective Lagrangian, implementing the chiral symmetry breaking SU(2)_L \otimes SU(2)_R \rightarrow SU(2)L+R with Goldstones, gauge bosons, the Higgs-like scalar and one multiplet of vector and axial-vector massive resonance states. The estimation is based on the short-distance constraints and a dispersive approach. The experimentally allowed range forces the vector and axial-vector states to be heavy, with masses above the TeV scale, and suggests that the Higgs-like scalar should have a WW coupling close to the Standard Model one.

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