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Oblique S and T parameters at one-loop level and heavy resonances

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The existence of a mass gap between Standard Model and possible New Physics states has been confirmed experimentally. As a consequence, effective field theories are appropriate to search for signals beyond the Standard Model. We consider a non-linear realization of the electroweak symmetry breaking, where the Higgs is a singlet with independent couplings and the Standard Model fields are coupled to bosonic heavy resonances. We present a preliminary next-to-leading-order calculation of the oblique S and T parameters. The experimentally allowed range of the S and T parameters constrain the resonances to be heavy enough, with masses above the TeV scale, $M_R > 2 \text{ TeV}$, in good agreement with our previous estimations, where only P-even operators were considered.

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