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Redefining Higgs interactions at the TeV scale

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Abstract

We present a field redefinition that simplifies the Higgs Effective Field Theory Lagrangian for the Electroweak Symmetry Breaking Sector. This simplification produces the same on-shell scattering amplitudes while greatly reducing the number of contributing Feynman diagrams for ww→n×h processes (which approximate the WLWL→n×h amplitudes at the TeV scale by means of the Equivalence Theorem).

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