

The Higgs Width in the SMEFT

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We calculate the total and partial inclusive Higgs widths at leading order in the Standard Model Effective Field Theory (SMEFT). We report results incorporating SMEFT corrections for two and four body Higgs decays through vector currents in this limit. The narrow width approximation is avoided and all phase space integrals are directly evaluated. We explain why the narrow width approximation fails more significantly in the SMEFT compared to the SM, despite the narrowness of the observed $SU(2) \times U(1)$ bosons in both theories.

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