

## Reduction of Couplings in the 2HDM

*Thursday 6 June 2024 18:40 (20 minutes)*

The method of reduction of couplings consists in the search for relations between seemingly independent couplings that are renormalization group invariant. In this talk the existence of such 1-loop relations among the top Yukawa, the Higgs quartic and the gauge colour couplings of the Type-II Two Higgs Doublet Model at a high-energy boundary is demonstrated. The phenomenological viability of the reduced theory suggests the value of  $\tan\beta$  and the scale in which new physics may appear.

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**Session Classification:** Parallel Session PII.6