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Effective field theories vs. oblique parameters in precision electroweak analyses

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TeV-scale new physics addressing the hierarchy problem can leave imprints on precision observables. In the absence of new light states, effective field theories (EFT) provide a consistent framework to characterize deviations from the Standard Model that is completely general. On the other hand, the historically influential oblique parameters (most notably S, T parameters) formalism is generally speaking only applicable to a restricted class of new physics scenarios known as universal theories. I will discuss the reconciliation of the two approaches by presenting an EFT description of universal theories, and clarify some issues regarding consistent use of oblique parameters in precision electroweak analyses.

Summary

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