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Subleading Factorization in SCET: Hard Scattering Operators and Radiative Functions

Thursday, 16 March 2017 09:00 (40 minutes)

We present a complete basis of power suppressed operators for $gg \to H$, classifying all operators which contribute to the amplitude at $\mathcal{O}(\lambda^2)$ and identifying the subset of operators which contribute in the cross section at this order. We show how helicity selection rules significantly simplify the construction of the operator basis. We perform matching calculations to determine the tree level Wilson coefficients of our operators. We also analyze the factorization of Lagrangian insertions at subleading power for collider physics processes.

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