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Higgs Transverse Momentum Distributions at the LHC

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In this talk I will present a factorization theorem for the Higgs transverse momentum spectrum using SCET (Soft Collinear Effective Theory). This theorem allows us systematically resum large logarithms of p_T in the regime $m_h \gg p_T \gg \Lambda_{QCD}$. The transverse momentum distributions of Higgs produced via gluon fusion will be presented and compared to previous results derived using effective field theory, as well as the results of Collins Soper and Sterman (CSS). The differences will be illuminated. I will also present new results for the Higgs p_T spectrum for b-quark fusion.

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