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# Soft gluons and the ordering problem

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Recent developments (JHEP07 (2012) 026) have shown that is not always possible to factorize all collinear singularities into process independent and universal functions. This breakdown of collinear factorization was anticipated using an algorithm to compute the leading soft gluon corrections to a hard process (JHEP08(2006)059). Such algorithm is base on the assumption that the successive emissions can be ordered in transverse momentum. In this work we show that this assumption is correct at the first two non-trivial orders. We do this by studying the leading behavior of the soft corrections to a hard process due to one virtual exchange and one and two real emissions.

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