

Three loop QCD corrections to heavy quark form factors

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We present color planar and complete light quark QCD contributions to the three loop heavy quark form factors in the case of vector, axialvector, scalar and pseudoscalar currents. We evaluate the master integrals applying a new method based on differential equations for general bases, which is applicable for all first order factorizing systems. The analytic results are expressed in terms of harmonic polylogarithms and real-valued cyclotomic harmonic polylogarithms.

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