

Order- α_s^2 corrections to the leptonic invariant mass spectrum in $B \rightarrow X_c \ell \bar{\nu}$.

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Experimental results for moments of the leptonic q^2 -spectrum in inclusive semileptonic B-meson decays often involve cuts on q^2 . Therefore, the spectrum itself (rather than its moments only) needs to be evaluated on the theoretical side. We present results of our calculation of $\mathcal{O}(\alpha_s^2)$ corrections to this spectrum that have been obtained via a numerical solution to differential equations for the relevant master integrals. Our findings agree with the recently published analytical results of Fael and Herren.

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