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NNLO corrections to the decay B -> D pi

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Hadronic decays of B mesons provide an essential contribution in testing the CKM structure of the Standard Model. It is therefore mandatory to increase the precision of their branching rations as much as possible, both experimentally and theoretically. In this talk we investigate the decay \bar B^0-> D^+\pi^- at NNLO in QCD factorization, a model-independent framework which disentangles perturbative from non-perturbative effects in the heavy-mass limit. We present the result for the two-loop correction to the hard scattering kernel, including calculational techniques such as Laporta reduction to master integrals and Mellin Barnes representations and differential equations for evaluating the latter.

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