

KKMC-hh for Precision EW Phenomenology at the LHC

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We describe the program KKMC-hh, which calculates Z boson processes in hadronic collisions using coherent exclusive exponentiation (CEEX) with exact second-order photonic corrections at next-to-leading log and first-order weak vertex corrections, including initial and final state photonic radiation and initial-final interference. We describe current applications to precision forward-backward asymmetry calculations for the measurement of the Weinberg angle at the LHC and upgrades in progress for use with an NLO QCD shower.

Secondary track (number)

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