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Non-perturbative matching of HQET heavy-light axial and vector currents in N_f=2 lattice QCD

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Based on a non-perturbative matching strategy between Heavy Quark Effective Theory (HQET) at O(1/m) and finite-volume QCD, we report on our determination of the effective theory parameters of all components of the HQET heavy-light axial and vector currents in two-flavour lattice QCD. These parameters, which can be fixed by matching conditions between suitable QCD and HQET observables evaluated through numerical simulations, are required to absorb the power divergences of lattice HQET, as, for instance, encountered in an effective theory computation of form factors for semi-leptonic decays of B- and B_s-mesons.

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