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D7: $B_s \rightarrow D_s^{(*)}$ form factors from lattice QCD with $N_f = 2$ Wilson-clover quarks

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We report on a two-flavor lattice QCD determination of the $B_s \rightarrow D_s$ and $B_s \rightarrow D_s^*$ transitions, which in the heavy quark limit can be parameterized by the form factors $calG$, and h_{A_1} , h_{A_2} and h_{A_3} . In the search of New Physics through tests of lepton-flavour universality, B_s decay channels are complementary to B decays and widely studied at B factories and LHCb. The purpose of our study is to explore a suitable method to extract form factors associated with $b \rightarrow c$ currents from lattice QCD. In particular, we present numerical results for $calG$ and h_{A_1} .

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