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Decay constants f_B and f_{B_s} from HISQ simulations

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We present preliminary, high-precision results for the decay constants f_B and f_{B_s} from simulations with HISQ heavy and light valence and sea quarks. Calculations are carried out with several heavy valence-quark masses on ensembles with 2+1+1 flavors of HISQ sea quarks at five lattice spacings and three light sea quark mass ratios m_{ud}/m_s , including approximately physical sea quark masses. This range of parameters provides excellent control of the continuum limit and of heavy-quark discretization errors.

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