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Decay constants of $B_{(s)}$ and $D_{(s)}$ meson on MILC HISQ a12m220 ensemble using the OK action and sequential Bayesian method

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We present our current progress on the lattice calculation of decay constants for $B_{(s)}$, $D_{(s)}$ mesons using sequential Bayesian method and the Oktay-Kronfeld (OK) action for the charm and bottom quarks (valence quarks). Here, the masses of charm and bottom quark are determined non-perturbatively. For the light spectator quarks (up, down and strange), we use HISQ action. Lattice calculation is done on MILC HISQ a12m220 ensemble ($N_f = 2 + 1 + 1$ flavors). f_{B_s}/f_B and f_{D_s}/f_D, the flavor $SU(3)$ symmetry breaking ratio, are presented. They are independent of the renormalization constants for the axial current.

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