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SU(3) symmetry breaking in f_B and f_{B_s}

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Experimental precision for measurements of B meson decays will continue to improve over the coming years as Belle II collects more data and the LHC returns to operation after its upgrade period. Independent measurements of V_{ub} will soon be possible using rare $B \to \tau \nu$ decays, for which B meson decay constants f_B are a key input.

We present updates from UKQCD/QCDSF/CSSM on the $SU(3)_f$ breaking in B meson decay constants, using weighted averaging methods during the correlator fitting process. The b-quarks are generated with an anisotropic clover-improved action, and are tuned to match properties of the physical B and B^* mesons. Configurations are generated with $\overline{m}=\frac{1}{3}(2m_l+m_s)$ kept constant to control symmetry breaking effects. Various sources of systematic uncertainty will be discussed, including those from continuum extrapolations and extrapolations to the physical point.

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