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## BSM $B - \bar{B}$ mixing

Wednesday, 28 July 2021 06:15 (15 minutes)

We are presenting our ongoing Lattice QCD study on  $B - \bar{B}$  mixing on several RBC/UKQCD and JLQCD ensembles with 2+1 dynamical-flavour domain wall fermions, with a range of inverse lattice spacings from 1.7 to 4.5 GeV and including physical-pion-mass ensembles. We compare various different fitting strategies to extract bag parameters  $B_{B_d}$  and  $B_{B_s}$  both for the standard-model operator as well as the four BSM operators. On each ensemble, we are simulating a range of heavy-quark masses from below the charm-quark mass towards the bottom-quark mass, with one data point reaching about 75% of  $m_{\eta_b}$ .

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