

$B_{(s)} - \bar{B}_{(s)}$ mixing on domain-wall lattices*Wednesday, 5 August 2020 15:00 (20 minutes)*

We are presenting our ongoing Lattice QCD study on $B - \bar{B}$ mixing. Comparing a variety of different methods, we are extracting bag parameters B_{B_s} and B_{B_d} on several RBC/UKQCD and JLQCD ensembles with 2+1 dynamical-flavour domain wall fermions, including physical-pion-mass ensembles. We are simulating a range of heavy quark masses on each ensemble from below the charm quark mass towards (but still below) the bottom quark mass. The plan for this study is to perform a full continuum limit allowing us to get an independent determination of the CKM matrix elements $|V_{ts}|$ and $|V_{td}|$, which will help to test whether the CKM matrix is indeed unitary.

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Session Classification: Weak Decays and Matrix Elements

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