

B_c spectroscopy using highly improved staggered quarks

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Using MILC ensembles of highly improved staggered quarks (HISQ) with lattice spacings down to $a=0.044$ fm, we report results obtained from heavyonium and heavy-charm HISQ correlators. Using HISQ valence quarks on successively finer lattices allows us to simulate near (and in fact just beyond) the b-quark mass. In particular we focus on the $B_c(2S)$ energy, which we compare with $O(\alpha_s)$ -improved non-relativistic QCD results computed on the same ensembles.

Primary author: Dr LYTLE, Andrew (University of Glasgow)

Co-authors: Dr COLQUHOUN, Brian (KEK); Prof. DAVIES, Christine (University of Glasgow)

Presenter: Dr LYTLE, Andrew (University of Glasgow)

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