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B to Kstar and Bs to phi form factors at low recoil from lattice QCD

Saturday 7 July 2012 18:00 (1 hour)

We present our calculation of B to Kstar and Bs to phi form factors (and those for B to rho and Bs to Kstar). These are obtained from lattice QCD calculations which include the effects of up, down, and strange sea quarks and use the nonrelativistic formulation for the bottom quark. Results are obtained directly in the low recoil (large q-squared) kinematic range, complementing results obtained using light-cone sum rules. The ability to determine these form factors accurately is a key ingredient in searches for and constraints on the types of BSM physics which can contribute to rare B decays.

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