

Study of the semileptonic and nonleptonic decay of the B_s meson

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We present results for different observables measured in semileptonic and nonleptonic decays of the B_s meson. The calculations have been done within the framework of a nonrelativistic constituent quark model. In order to check the sensitivity of all our results against the inter-quark interaction we use five different quarkquark potentials. We obtain form factors, decay widths and asymmetry parameters. In the limit of infinite heavy quark mass our model reproduces the constraints of heavy quark spin symmetry. For the actual heavy quark masses we find nonetheless corrections to that limiting situation for some form factors. We also analyze exclusive nonleptonic two meson decay channels within the factorization approximation.

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