

Predictions of observables in semileptonic $B_c \rightarrow J/\psi$

With the latest lattice QCD calculations on form factors of $B_c \rightarrow J/\psi$, we use non-relativistic QCD to fit tensor form factors. Using the fitted form factors, we study different model-independent New physics scenarios and R_2 , U_1 , S_1 leptoquark model and give the predictions of $R_{J/\psi}(q^2)$, $P_\tau^{J/\psi}(q^2)$, $P_{J/\psi}(q^2)$ and $\mathcal{A}_{FB}^{J/\psi}(q^2)$ in allowed new physics scenarios and leptoquark model.

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