

Study of vector and tensor meson decay constants in light-front quark model

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We study the decay constants (f_M) of the Charmful and beautiful vector and tensor mesons in the light front quark model. Here, we tried two different distribution amplitudes to study the decay constants. With the known pseudoscalar meson decay constants of f_D , f_{D_s} , f_B and f_{B_s} as the input parameters to determine the light-front wave functions, we obtain that $f_{D^*, D_s^*, B^*, B_s^*} = (252.0^{+13.8}_{-11.6}, 318.3^{+15.3}_{-12.6}, 201.9^{+43.2}_{-41.4}, 244.2 \pm 7.0)$ and $f_{D_2^*, D_{s2}^*, B_2^*, B_{s2}^*} = (143.6^{+24.9}_{-21.8}, 209.5^{+29.1}_{-24.2}, 80.9^{+33.8}_{-27.7}, 109.7^{+15.7}_{-15.0})$.

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