

CALCULATION OF FORM FACTORS AND SEMI-LEPTON BRANCHINGS OF THE $B \rightarrow \rho$ TRANSITION IN THE COVARIANT QUARK MODEL

In this paper, we study the $B \rightarrow \rho$ transition within the covariant confined quark model. The main focus is on calculating the form factors for the $B \rightarrow \rho$ channels over the entire dynamic range of the transferred momentum q^2 . Using these form factors, we calculated the branchings for the semileptonic decay $B^+ \rightarrow \rho^+ l^+ l^-$, where l are leptons. The results obtained show good agreement with the available theoretical data.

Section

Nuclear physics (Section 1)

Primary authors: ISSADYKOV, Aidos (INP ME RK & JINR); ILYASSOV, Mukhammedkhanafiya (INSTITUTE OF NUCLEAR PHYSICS, Al-Farabi Kazakh National University)

Presenter: ILYASSOV, Mukhammedkhanafiya (INSTITUTE OF NUCLEAR PHYSICS, Al-Farabi Kazakh National University)

Track Classification: The V International Scientific Forum “Nuclear Science and Technologies”: Nuclear physics (Section 1)