

The q^2 moments in inclusive semileptonic B decays

Wednesday, September 25, 2024 10:30 AM (30 minutes)

In this talk I will present the calculation of moments of the q^2 distribution in inclusive semileptonic B decays with a lower cut on the dilepton invariant mass q^2 , confirming known results. The theoretical predictions are then used in a global fit to moments of the spectrum of inclusive semileptonic B decays, allowing the extraction of $|V_{cb}|$. The fit includes the recently measured q^2 moments, together with moments in the lepton energy and hadronic invariant mass. The uncertainty on the non-perturbative parameters and on $|V_{cb}|$ slightly decreases, yielding to the final value $|V_{cb}| = (41.97 \pm 0.48) \times 10^{-3}$.

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