Determination of $|V_{cb}|$ and related results from BABAR

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We report on determination of the CKM matrix element amplitude $|V_{cb}|$ with the BaBar detector. We measured the partial branching fraction, lepton-energy moments, and hadron-mass moments in inclusive semileptonic decays $B \to X_c \ell \nu$. A global fit to a Heavy-Quark-Expansion calculation allowed precise determination of $|V_{cb}|$, m_b, m_c, $\mathcal{B}(B \to X_c \ell \nu)$, and four non-perturbative parameters.

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