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[325] Measurement of the Cabibbo-Kobayashi-Maskawa matrix element $|V_{cb}|$ using the decay $B^- \rightarrow D^0 l^- \nu_l$ at Belle II

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A long-standing discrepancy in flavour physics is observed in the determination of the CKM elements $|V_{cb}|$ and $|V_{ub}|$. For $|V_{cb}|$, a combined tension of about 3σ is seen between different methods of determination. We revisit the decay $B^- \rightarrow D^0 l^- \nu_l$ using data of the Belle II experiment to clarify the experimental status of this parameter. In addition to a measurement of the decay branching fraction and a test of lepton universality between electron and muon channels, the rate as a function of the 4-momentum squared of the lepton-neutrino q^2 is determined to fit for the CKM element $|V_{cb}|$. The preliminary results will be presented.

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