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Diluting quark flavor hierarchies using dihedral symmetry

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We present a D4 flavored extension of the SM which provides an intuitive reasoning for the masses and mixing patterns in the quark sector. In our model, the Cabibbo mixing angle becomes related to the ratio of two vacuum expectation values. In fact, the orders of magnitude of the CKM matrix elements are readily obtained from the hierarchical nature of the vacuum expectation values. Moreover, we also show that the smallness of the off-Cabibbo elements in the CKM matrix
is strongly connected to the heaviness of the third generation of quarks.

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