

## Flavor gauge bosons at the TeV scale

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The hierarchy of fermion masses may have its origin in the spontaneous breaking of a horizontal flavor gauge symmetry between fermion families. We shall discuss the possibility that flavor-changing gauge bosons have masses of the order of TeV, without contradicting to the limits on the flavor-changing processes. This can also explain the violation of the CKM unitarity at more than 4 sigma level which is indicated by the recent precision determinations of the CKM matrix elements of quark mixing. We shall discuss also some cosmological limits and implications.