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Leptonic decay-constant ratio f_K/f_π from clover-improved $N_f = 2 + 1$ QCD

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The leptonic decay-constant ratio f_K/f_π is calculated from lattice-QCD simulations using $N_f = 2+1$ dynamical fermion flavors in the clover-improved formulation and 2-HEX smearing. The simulations were performed at a range of mass-degenerate light quarks including the physical point and at various lattice couplings and volumes, allowing to quantify all relevant sources of systematic uncertainties for our final number of the decay-constant ratio. Utilizing input from ChPT, we also quote the charged decay-constant ratio f_{K^\pm}/f_{π^\pm} . With further input from super-allowed nuclear β -decays, eventually we obtain an estimate for the CKM-matrix element V_{us} .

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