

Corrections to Dashen's theorem from lattice QCD and quenched QED

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We use our $N_f=2+1+1$ staggered lattice QCD configurations to compute the corrections to Dashen's theorem and the quark mass ratio m_u/m_d . We use quark masses around their physical values, and reach the continuum limit using 5 different lattice spacings. We use the QED_L formulation, and include the QED and u-d mass difference effects in the valence sector.

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