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Isospin breaking in the decay constants of heavy mesons from QCD sum rules

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We propose a new method for calculating the dependences of the decay constants of heavy-light mesons on the light-quark mass m based on QCD sum rules at infinitely large Borel mass parameter. For an appropriate choice of the correlation functions, all condensate contributions vanish and the m-dependence of the decay constants is shown to be mainly determined by the known analytic m-dependence of the diagrams of perturbative QCD. The results for strong isospin breaking in the decay constants of heavy pseudoscalar and vector mesons are reported.

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