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Hadron mass decomposition from Lattice QCD

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Based on the lattice simulation with overlap fermions on 2+1 DWF fermion configurations on the 24^{^3} x 64 lattice, we carry out the first lattice QCD calculation of the quark and glue contributions to pseudoscalar and vector mesons and the nucleon. The quark mass term contributes about 50% to the mass of the light pseudoscalar mesons; whereas, it is not important in the masses of light vector mesons and the nucleon. With the QCD Hamiltonian and the trace anomaly, the glue components are deduced. They play an important role in the mass of the light hadrons.

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