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Parton distribution functions of Δ^+ on the lattice

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We present the unpolarized parton distribution functions of Δ^+ baryon in lattice simulation based on large momentum effective theory. We use $N_f = 2 + 1 + 1$ twist mass fermion with clover term and pion mass is 260 MeV. The simulation is done using fixed sink sequential inversion method with Gaussian-momentum-smearred source while the largest baryon momentum is 1.2GeV. By comparing the $\bar{d} - \bar{u}$ content in the proton with Δ^+ baryon, the role of chiral symmetry in generating the sea flavor asymmetry is tested.

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