

title

Nucleon isovector couplings from lattice QCD at the physical point

abstract

I report the recent progress on our study of the nucleon couplings including the axial, tensor and scalar couplings on a $(10.8\text{fm})^4$ lattice using the PACS10 gauge configuration generated by the PACS Collaboration. I also estimated the renormalization constant in the RI/SMOM scheme which stands for Regularization Independent Symmetric Momentum-subtraction scheme. Using the matching and evolution factors obtained from the perturbation theory, I then evaluated the renormalized nucleon couplings in the $\overline{\text{MS}}$ scheme at the renormalization scale of 2 GeV.