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## The calculation of nucleon theta EDMs using background field method

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The measurements of nucleon Electric Dipole Moments (EDMs) are important to probe CP violation and physics beyond the Standard Model. In this talk, I will report our recent progress in calculating nucleon theta EDMs using background electric field. We extract neutron EDMs by measuring the energy shift of 2pt correlation function in the presence of background field. The gauge ensembles are dynamical domain wall configurations with lattice spacings of  $a=0.11$  fm and the corresponding pion mass are 340MeV and 430MeV, respectively.

### Topical area

Structure of Hadrons and Nuclei

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