Contribution ID: **119** Type: **Oral**

Lattice QCD calculation of nucleon EDM

We report our lattice QCD calculation of the nucleon electric dipole moment (EDM) induced by the theta term. We use lattice chiral fermions in our calculation, which provides a fermionic definition of the topological charge exhibiting small discrete effects. Also, the use of chiral fermions guarantees a correct chiral limit even at finite lattice spacings and enables us to reliably extrapolate our result from heavy pion masses to the physical point. With the help of the cluster decomposition error reduction (CDER) technique, we have obtained so far the best results so far for the nucleon EDM.

Primary author: LIANG, Jian (华南师范大学)

Presenter: LIANG, Jian (华南师范大学)