The 34th International Symposium on Lattice Field Theory (Lattice 2016)



Contribution ID: 358

Type: Talk

Nucleon Vector and Axial-Vector Form Factors

Thursday 28 July 2016 15:00 (20 minutes)

We present the status of the calculation of the nucleon iso-vector axial and vector form factor using the MILC $N_f = 2 + 1 + 1$ HISQ ensembles with lattice spacings a = 0.12, 0.09, and 0.06 fm and three values of light quark masses corresponding to pion masses 310, 220, 130 MeV. Valence quarks are simulated with the clover action. A number of techniques to increase the statistics cost effectively, such as the AMA (all-mode-averaging) method, will be discussed.

Author: Dr JANG, Yong-Chull (Los Alamos National Laboratory)

Co-authors: Dr YOON, Boram (Los Alamos National Laboratory); Prof. LIN, Huey-Wen (Michigan State University); Dr GUPTA, Rajan (Los Alamos National Lab); Dr BHATTACHARYA, Tanmoy (Los Alamos National Laboratory)

Presenter: Dr JANG, Yong-Chull (Los Alamos National Laboratory)

Session Classification: Hadron Structure

Track Classification: Hadron Structure