32nd International Symposium on Lattice Field Theory (Lattice 2014)



Contribution ID: 169 Type: Talk

Volume effects on the method of extracting form factors at zero momentum

Monday, 23 June 2014 16:50 (20 minutes)

The Rome method allows one to extract form factors using lattice computations performed strictly at zero momentum. We investigate the size of finite volume effects resulting from this method. As a test case, we focus on the pion charge radius and show how to ascertain the finite volume effect with the aid of chiral perturbation theory. The framework developed can easily be generalized to account for modified infrared physics of other low-energy matrix elements extracted at zero momentum.

Primary author: Prof. TIBURZI, Brian (City College of New York)

Presenter: Prof. TIBURZI, Brian (City College of New York)

Session Classification: Hadron Structure