



Contribution ID: 330

Type: **Talk**

## Neutral pion polarizabilities from four-point functions

*Thursday 1 August 2024 11:30 (20 minutes)*

We report a lattice QCD simulation of electric and magnetic polarizabilities of  $\pi^0$  using the four-point function method. The connected diagrams are evaluated on the  $24^3 \times 48$  lattice using Wilson action with  $a=0.1$  fm and pion mass from 1100 to 370 MeV. Results are compared with existing calculations from the background field method.

**Primary author:** LEE, Frank (George Washington University)

**Co-authors:** WILCOX, Walter (Baylor University); Prof. ALEXANDRU, Andrei (George Washington University); CULVER, Chris (University of Liverpool); NADEEM, Shayan (Baylor University)

**Presenter:** LEE, Frank (George Washington University)

**Session Classification:** Structure of hadrons and nuclei

**Track Classification:** Structure of Hadrons and Nuclei