



Contribution ID : 83

Type : **Talk**

Polarizability of pseudoscalar mesons from the lattice calculations

Friday, 29 July 2016 16:50 (20)

We explore the ground state energy of pseudoscalar charged and neutral mesons as a function of external magnetic field in SU(3) lattice gauge theory. We calculate the dipole magnetic polarizabilities and hyperpolarizabilities of charged and neutral pseudoscalar pi and K mesons. It was found that the magnetic polarizability of charged pion agrees with the experimental prediction of COMPASS collaboration.

Primary author(s) : Dr LUSCHEVSKAYA, Elena (State Scientific Center of Russian Federation - Institute of Theoretical and Experimental Physics)

Co-author(s) : Ms SOLOVEVA, Olga (Institute for Theoretical and Experimental Physics & National Research Nuclear University MEPhI (Moscow Engineering Physics Institute))

Presenter(s) : Dr LUSCHEVSKAYA, Elena (State Scientific Center of Russian Federation - Institute of Theoretical and Experimental Physics)

Session Classification : Hadron Structure

Track Classification : Hadron Structure