



Analytical structure of the quark propagator

Saturday, August 6, 2016 6:00 PM (2 hours)

In this work we have studied the pole locations of the quark propagator by the solution of quark Dyson Schwinger equation (DSE) in term of the truncation. We have fitted the Rainbow ladder solution (RL) of the quark DSE with the Qin-Chang interaction on the real axis ($p^2 > 0$) and simultaneously the solution on the complex parabola with the same interaction. The fits were made using the well known complex conjugate mass pole parametrization and we will show that the pole locations changes quite a bit. In addition, we will show how the pole locations change when we go beyond the RL truncation.

Primary author: SERNA, Fernando (IFT-UNEPS)

Presenter: SERNA, Fernando (IFT-UNEPS)

Session Classification: Poster Session

Track Classification: Strong Interactions and Hadron Physics