Hadron Structure in Continuum QCD

Abstract

To better understand the phenomenon of QCD, that is, dynamical chiral symmetry breaking and confinement, one can investigate the hadron properties and the distributions of gluons and quarks inside. Dyson-Schwinger equations method is a powerful way to study QCD which contains both dynamical chiral symmetry breaking and confinement. Via this continuum QCD method, we then computed the parton distribution amplitudes and form factors of mesons. However, to employ the solutions of Dyson-Schwinger in studying hadrons, people must explore some ways to project the solutions onto the physical space. Therefore, in this presentation, I will discuss the methods to make this QCD-connected schemes work for studying hadron properties, for instance, the results of the parton distribution amplitudes for light-light and heavy-heavy mesons and also the kaon electromagnetic form factor will be presented.