Meson Spectroscopy from Continuum QCD methods

Content

Hadrons are subatomic particles composed of quarks and gluons bound by the strong interaction. The spectroscopy of hadrons is a challenging and active field of research that aims to understand the properties and structure of these particles. In this contribution, we investigate the ground state and radial excitation masses of hadrons using Bethe-Salpeter equations (BSEs), a non-perturbative approach that captures the dynamics of quark-antiquark interactions. We solve the BSEs numerically using a suitable kernel and compare our results with experimental data and other theoretical models. We focus on mesons, which are hadrons made of a quark and an antiquark, but our method can be extended to other types of hadrons, such as baryons, tetraquarks and glueballs.

Summary

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