

Glueballs from DSEs and BSEs

Tuesday, 6 June 2023 14:30 (30 minutes)

The spectrum of QCD is expected to contain, besides bound states of quarks, also bound states of gluons. These glueballs can mix with other states that have the same quantum number. For pure Yang-Mills theory, on the other hand, glueballs are the only physical degrees of freedom which makes the picture much clearer. Using state-of-the-art, parameter-free solutions for the propagators and vertices from Dyson-Schwinger equations (DSEs) as input, I present part of the glueball spectrum as calculated from bound state equations (BSEs). The good agreement of the results with lattice results paves the way for studying the mixing with conventional mesons in the future.

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Session Classification: Exotic hadrons and candidates

Track Classification: Exotic hadrons and candidates