

Hadron Scattering, Resonances and QCD

The non-perturbative nature of quantum chromodynamics (QCD), has historically left a gap in our understanding of the connection between the fundamental theory of the strong interactions and the rich structure of experimentally observed phenomena. For the simplest properties of stable hadrons, this is now circumvented by utilizing lattice QCD. In this talk I outline a path towards a rigorous determination of few-hadron observables from lattice QCD. I will illustrate the power of this methodology by presenting recently determined scattering amplitudes in the light-meson sector and discuss their resonance content. I will present the first determination of a electroweak form factor of a hadronic resonance from QCD. Finally, I give an outlook of this emergent field.

Summary

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