

Recent Progress in Hadron Spectroscopy Using Lattice QCD

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Lattice QCD has matured to a degree where it is now possible to study excited hadrons as they truly appear in nature, as short-lived resonant enhancements decaying into multiple possible final states.

Through variational analysis of matrices of correlation functions computed with large bases of interpolating fields it has proven possible to extract many excited state energy levels, and these can be used to constrain the hadron-hadron scattering amplitudes in which hadron resonances can be observed.

I will illustrate recent progress with several examples including coupled-channel scattering in the $\pi\eta/K\bar{K}$ and $\pi\pi, K\bar{K}, \eta\eta$ systems in which the a_0, f_0 mesons appear.

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