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Hadron Spectroscopy from Lattice QCD Simulations

Thursday 29 August 2024 16:45 (45 minutes)

Hadrons, known to be the effective degrees of freedom of "strong" interactions, that emerge from the fundamental degrees of freedom (quarks and gluons) at the low-energy scales demand nonperturbative approaches for an understanding from first principles. In this talk, I will discuss how the composition of the hadron spectrum can be studied using numerical simulations of Quantum Chromo- Dynamics (QCD), the theory of strong interactions. Starting with the basic idea on how to extract masses of strong interaction stable hadrons in such investigations, I will discuss some of the intriguing details involved in modern day efforts to understand hadron-hadron interactions that result in resonances and other features in related scattering amplitudes using simulations of QCD on a finite volume Euclidean space-time grid, otherwise referred to as lattice QCD.

Internet talk

Yes

Is this an abstract from experimental collaboration?

No

Name of experiment and experimental site

NA

Is the speaker for that presentation defined?

Yes

Details

NA

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