XIIth Quark Confinement and the Hadron Spectrum



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On the description of the exotic states within QCD sum rules

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The method of QCD sum rules is based on the extraction of hadron observables (decay constants, form factors, etc) from the correlation functions of the appropriate quark currents. Because of the properties of the correlation functions containing the exotic multiquark (i.e. four-quark, five-quark) currents, the contribution of the exotic multiquark hadrons to these correlation functions emerge only at order alpha_s and higher; the leading-order diagrams do not contain the contributions of the exotic multiquark states. Respectively, for the analysis of the exotic-states properties within QCD sum rules, the knowledge of the radiative corrections to the correlations functions is mandatory.

Summary

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