

Calculation of Kaon Electromagnetic Form Factor in the Framework of Coupled Schwinger-Dyson and Bethe-Salpeter Formulation

WANG Zhi-Gang,¹ WAN Shao-Long² and WANG Ke-Lin^{1,2}

¹ Center for Nonlinear Science, University of Science and Technology of China, Hefei 230026, China

² Department of Astronomy and Applied Physics, University of Science and Technology of China, Hefei 230026, China

(Received: 2000-6-29; Revised: 2000-12-15)

Abstract: The kaon electromagnetic form factor is calculated in the framework of coupled Schwinger-Dyson equation in rainbow approximation and Bethe-Salpeter equation in ladder approximation with the modified flat-bottom potential, which is the combination of the flat-bottom potential with considerations for the infrared and ultraviolet asymptotic behaviours of the effective quark-gluon coupling. All our numerical results give good fit to experimental values and other theoretical results.

PACS: 13.40.Gp

Key words: Schwinger-Dyson equation, Bethe-Salpeter equation, electromagnetic form factor

[\[Full text: PDF\]](#)

Close