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Charged Pion Form Factor Determination in the Range of $Q^2=0.6\sim1.6$ (GeV/c)²

Nader Ghahramany, Kamran Rostami, and Mohammad Ghanatian

Physics Department, and Institute for Studies in Theoretical Physics and Mathematics (IPM), Shiraz University, Shiraz 71454, Iran (Received: 2003-10-20; Revised:)

Abstract: Using the most recent differential cross section data for e-p quasi-elastic scattering, the charged pion formation and its form factor F_π is calculated in the energy range of 2.4~4 GeV at Q²=0.6 $\sim\!1.6$ (GeV/c)². The functional dependence of the charged pion form factor to the separated cross section σ_L is investigated and compared to the previously determined result.

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Key words: charged pion, form factor, electroproduction, cross section

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