Contribution ID : **97** Type : **not specified**

Pion form factor from a contact interaction

Abstract

In a Poincare'-covariant vector-boson-exchange theory, the pion possesses components of pseudovector origin, which materially influence its observable properties. For a range of such quantities, we explore the consequences of a momentum-independent interaction, regularised in a symmetry-preserving manner. The contact interaction, whilst capable of describing pion static properties, produces a form factor whose: evolution for Q^2>0.17GeV^2 disagrees markedly with experiment; and asymptotic power-law behaviour conflicts strongly with perturbative-QCD.

Primary author(s) : Dr. GUTIERREZ, LAURA XIOMARA (MCTP)

Presenter(s) : Dr. GUTIERREZ, LAURA XIOMARA (MCTP)