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Quark-Hadron Duality[1] SABINE JESCHONNEK, The Ohio State University , J.W. VAN ORDEN, Jefferson Lab & Old Dominion University — Quark-hadron duality is an interesting phenomenon that occurs in many different processes. It was first observed in inclusive electron scattering by Bloom and Gilman, and has been confirmed recently by high precision data from Jefferson Lab. The data show that the structure function in the resonance region averages to the scaling curve. One of the main practical uses of duality is the extraction of information on the deep inelastic region from the resonance data. I will discuss a model for the study of quark-hadron duality in inclusive electron scattering based on solving the Dirac equation numerically for a scalar confining linear potential and a vector color Coulomb potential. This model qualitatively reproduces the features of quark-hadron duality for all potentials considered.

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