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Relativistic models for the (e,e'p) reaction on ^{208}Pb JOAQUIN LOPEZ HERRAIZ, Univ. Complutense de Madrid, JUAN CARLOS CORNEJO, Cal. State Univ., Los Angeles, JEFFERSON LAB HALL A COLLABORATION — ^{208}Pb is the nucleus that one would pick as the best existing test of the shell model. That's why it has been extensively explored in the past, for example, by means of the (e,e'p) reaction. Jefferson Lab is ideally suited to perform (e,e'p) reactions and recently the (e,e'p) reaction on lead has been measured for the first time at this facility. We attempt to determine spectroscopic factors by comparing high statistics, quasielastic data for cross-sections at several q values to relativistic mean field predictions, over a wide range of missing momentum. The A_{TL} cross section asymmetry predictions from these relativistic models will also be compared to the data measured in fixed quasielastic kinematics, $q=1$ GeV/c, $\omega=0.433$ GeV, $Q^2=0.81$ GeV² at Jefferson Lab. Relativistic mean field calculations predict values of A_{TL} that deviate substantially from the predictions that do not include the enhancement of the lower component of the wave function due to dynamical relativistic effects. The role played by correlations in the high missing momentum region of the (e,e'p) reaction is expected to be disentangled.

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