

CORRECTIONS TO FORM FACTORS AND DEUTERON WAVE FUNCTION

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Deuteron form factors contain kinematic and dynamic corrections. They are described in the framework of particle quantum mechanics [1] and in the impulse approximation [2]. For example, in [1] the electric deuteron form factors G_0 , G_2 contain corrections

$$C_E = C_{E0} + C_{E1} + C_{E2} + C_{E3}; \quad (1)$$

$$C_Q = C_{Q0} + C_{Q1} + C_{Q2} + C_{Q3}. \quad (2)$$

The calculations of the deuteron form factors G_0 , G_2 are carried out using the deuteron wave functions in the coordinate representation for the Reid93 potential [3]. All corrections in (1) and (2) and the coefficients J_C , J_Q in G_i were taken into account. The obtained deuteron form factors can be used for calculations of deuteron structural functions, differential cross-section of elastic scattering of unpolarized electrons by unpolarized deuterons, tensor polarization and other values [4].

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