Deuteron wave function and elastic eD scattering

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A study of the deuteron structure in the framework of relativistic quantum mechanics is presented. The deuteron wave function and neutron form factors are fitted to the electromagnetic deuteron form factors. We also compare results obtained by different realistic deuteron wave functions stemming from Nijmegen-I, Nijmegen-II, JISP16, CD-Bonn, Paris, Argonne, Idaho and Moscow (with forbidden states) potentials. It is shown that the electromagnetic deuteron form factors may be described in a simple potential model without explicit exchange currents.

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