# MULTIPLE-CENTER EIKONAL APPROACH AND SCATTERING OF PROTONS ON NUCLEI WITH $A = 3, 4$ AT ENERGIES OF 600 AND 1000 MeV

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The multiple-center eikonal approach with regard to the scattering of high-energy protons by atomic nuclei is investigated. In contrast to the Glauber—Sitenko theory, a new approach uses the three-dimensional generalized profile function of a nucleon, which allows us to take into account off-shell effects in the intermediate acts of scattering. The developed formalism is applied to the calculations of cross sections of the elastic scattering of protons at energies of 600 and 1000 MeV by $^{3}$H, $^{3,4}$He nuclei, which are considered in the framework of a realistic multiplicative model. The results of calculations are compared with experimental data and calculations based on the common diffraction theory.