

PHENOMENOLOGICAL ANALYSIS
OF THE PRODUCTION CHANNELS
OF THREE AND FOUR α -PARTICLES
IN (^{16}O p)-COLLISIONS AT 3.25A GeV

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Earlier we studied (^{12}C eM) interactions at 4.5 A GeV in two and three α -particles production channels. There, the azimuthal asymmetry and collinearity were discovered. In the given work, the similar experiments were carried on. The results are compared with the data obtained from the Monte Carlo simulations. We take into account the energy-momentum conservation law with the precision of up to 10^{-6} , the events were generated in accordance with the experimental probabilities of every exclusive channel of initial nucleus decomposition, the momentum components transferred to the fragmenting nucleus by the proton-target were generated as the Gaussian distribution; and finally, the effect of identity of the ^8Be nuclei decays, and the interactions between α -particles in the final state leading to narrow angular correlations by using the free parameter of the model – the probability for the generation of α -particle pair's momentum vectors.