

**ON SOME MECHANISMS OF INTERACTION WITH CARBON'S NUCLEI
AT ALPHA-PARTICLE'S ENERGY 27.2 MeV**

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On U-120 cyclotron in correlation experiment in parallel to the study of $\alpha + d$ interaction the mechanisms of excitation and decay of states of a nucleus ^{12}C , formed as a result of an irradiation of a $(\text{CD}_2)_n$ target by beam of alpha-particles with energy 27.2 MeV by registration of alpha-particle's coincidences were investigated. Basic mechanism of $\alpha + ^{12}\text{C}$ interaction at energy of incident particles 27.2 MeV are the formation of the excited states ^{12}C , which break up on α -particle and nucleus ^8Be in ground and excited states. Intensive occupancy of excited level of ^8Be with energy excitation approximately 7 MeV is defined.