

TOTAL BREAK-UP OF THE ALPHA-PARTICLE AFTER THE COLLISION WITH A NUCLEON

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In the framework of molecular dynamics neutron scattering on α -target was considered. Trial wavefunction was chosen in a way that allowed to treat complete break-up of α -particle. Dependencies of the energy, transmitted to α -particle after the collision, on the energy and impact parameter of incident particle were obtained. The total cross-section of complete disintegration of α -particle and the reaction time were estimated.