

STRUCTURE EFFECT OF A TWO-FRAGMENT
NUCLEUS ON THE PENETRATION FACTOR
FOR ITS COULOMB BARRIER

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S u m m a r y

A general formalism has been elaborated and on its basis the influence of the structure of a two-fragment nucleus (composed of a charged and neutral particles) on the magnitude of the probability of finding an incident charged particle at the centre of mass of the complex has been studied. A formula for the relative difference of the penetration factors (to a charged particle) for the Coulomb field of the two-particle complex and for the Coulomb field of the corresponding point charge has been derived. In the first approximation in the Sommerfeld parameter, the effect of the target structure on the probability of closing in the charged particle (the muon, pion, kaon and proton) on two-fragment nuclei (the deuteron and two lightest lambda hypernuclei, ${}^3_{\Lambda}\text{H}$ and ${}^5_{\Lambda}\text{He}$) has been calculated.