

THE OPTICAL POTENTIAL FOR LIGHT WEAKLY BOUND DEUTERON-LIKE PARTICLES SUBBARRIER ELASTIC SCATTERING

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The analytical expression for the optical potential of light weakly bound deuteron-like particles subbarrier elastic scattering in the electric field of heavy nuclei have been obtained and the calculations of these potentials for deuteron and ${}^6\text{He}$ ions scattering by ${}^{208}\text{Pb}$ nuclei have been made. The properties of these potentials were investigated. It is shown that including of the electric optical potential enable to explain the origin of nonphysical OM parameters at the theoretical interpretation of elastic scattering data