THE CRITERION OF ADIABATIC APPROXIMATION FOR THE WEAKLY-BOUND PARTICLES COULOMB ELASTIC SCATTERING PROBLEM

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Electric optical potential (EOP) for the weakly-bound particles (d, ⁶He, ¹¹Li) elastic scattering has been calculated in the adiabatic approximation. The analytic Wentzel-Kramers-Brillouin expression for EOP has been obtained. The criterion of adiabatic approximation for the weakly-bound particles elastic scattering problem are received. It is shown that these criterion can not be fulfilled in the vicinity of the Coulomb turning points.