

GREEN FUNCTION OF THE PROBLEM
OF TWO COULOMB CENTERS
WITH IDENTICAL CHARGES

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S u m m a r y

The expansion in spheroidal functions of the Green function of the quantum mechanical problem of two identical Coulomb centers is constructed. On the expansion of regular and irregular radial Coulomb spheroidal functions in series, solution of the degenerate hypergeometric equation are used as the basis system of functions. Rather simple three-term recurrence relations for the coefficients of these expansions are obtained. It is shown that, in the limit of united atom, the built Green function of the problem with two Coulomb centers transforms into the Green function of the problem with one Coulomb center in spherical coordinates.