

DYNAMICAL  
SYMMETRY AND SEPARATION  
OF VARIABLES THE SCHRODINGER  
EQUATION WITH A TWO-CENTER  
CONFINEMENT-TYPE POTENTIAL

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S u m m a r y

We obtained a spherical integral of motion and a group of dynamical symmetry in the quantum mechanical problem of two centers  $eZ_1Z_2\omega$  with the Coulomb and oscillator interactions. The group properties of solutions to this problem are investigated. As the dynamical symmetry groups of the problem, we consider the group  $P(3) \otimes P(2.1)$ , being a direct product of two groups of motions of three-dimensional spaces, and wider groups of motions of six-dimensional spaces,  $P(5.1)$  and  $P(4.2)$ . The opportunities of applications of the obtained results for solution of wide-circle problems of hadronic physics are discussed, in particular for calculation of the spectra of energy of QQq-baryons and QQg-mesons.