

VARIATIONAL
SOLUTION OF THE SCHRÖDINGER
EQUATION FOR LIGHT NUCLEI WITHOUT
SYMMETRIZATION OF TRIAL FUNCTIONS

P.I. Golubnichii, S.D. Krivonosov, T.M. Slepichko

V. Dal' East-Ukrainian National University
(20a, Molodizny Kwart., Lugansk 91034, Ukraine;
e-mail: zmeysss@mail.ru)

S u m m a r y

It is shown that the problem of derivation of the antisymmetric wave function (WF) of a system of identical particles can be reduced to that for a system without a predefined permutation symmetry, which considerably simplifies numerical calculations. This approach is used to calculate the binding energies of nuclei with $A = 3 \div 6$, and the results are compared with the literature data.