THE NUMERICAL SOLUTION OF FADDEEV'S EQUATIONS AND THE CALCULATION OF *ND* - SCATTERING CROSS SECTION IN FUNDAMENTAL K-HARMONIC APPROXIMATION

V. K. Tartakovsky^{1,2,3}, V. I. Kovalchuk², I. V. Kozlovsky³

¹Institute for Nuclear Researches, National Academy of Science, Kyiv ²Taras Shevchenko National University Physics Faculty, Kyiv ³Bogolyubov Institute for Theoretical Physics, National Academy of Science, Kyiv

We have considered the problem of neuteron-deuteron scattering at low energies. Representing solution of corresponding Faddeev's equations as sum of asymptotic wave function and rapidly convergencing series of hyperspherical harmonics, we have calculated basic term of this series with value of full moment K = 0. The angular distribution of cross section for *nd*-scattering at 3,28 MeV neutron energy has been computed and compared with the experiment.