

3) Fundamental state of the neutral alpha-matter at zero temperature

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A better assessment of convergence property of the cluster expansion, illustrated in the scientific report 2012, could be established only if we go to next order. The cluster expansion of the 5-th order in the Percus-Yevick approximation contains 7 main diagrams. The energy calculation corresponding to each diagram implies a 15 order integral. Using folding numerical techniques, developed by the present author, we were able to obtain calculable expressions