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Staying probability of valence neutron around each clusters TOORU YOSHIDA, NAOYUKI ITAGAKI, University of Tokyo, TAKAHARU OT-SUKA, University of Tokyo, CNS, RIKEN — It has been shown that there are many states in light nuclei which have alpha cluster components, for example in Be isotopes and in C isotopes. If we calculate larger system like Ne isotopes, shell model configuration also become more important. Therefore we need to superpose many Antisymmetrized Molecular Dynamics (AMD) basis to describe such nuclei. The AMD Triple-S is such kind of method. Based on this method we confirm existence of alpha correlation. We take variety of configuration of the core, for example very developed cluster structure. We see to what extent these configurations are realized. Afterward we restrict the distance between clusters and show the change of single-particle motion of valence neutrons as a function of the distance. Here we take notice of staying probability of valence neutrons around each clusters of the core. We define the probability properly, and we can see that the behavior is quite different between in positive parity states and in negative parity states.

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