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*Model- Independent Approaches for the Description of Quantum Systems.*

The main problem that arises when investigating dynamics of quantum systems is the problem of kinematic rotations under particle permutations. When number of particles increases, kinematic rotations include not only particle permutations but also transitions between different possible configurations, and mathematical calculations using complex general formula become impossible. Proposed model-independent approach for the description of N particle quantum systems in multidimensional momentum space solves this problem by using the Parentage Scheme of Summarization to the N-body symmetrized basis construction, necessary for the description of the structural characteristics and decay reactions of quantum systems with arbitrary amount of particles. Generalized mathematical formalism to the construction of N-particle fully symmetrized hyperspherical functions on the basis of the N-particle hyperspherical functions symmetrized with respect to N-1 particles is applied to the solution of few-body problem in hypernuclear physics. Wave functions are expanded in a complete set of symmetrized N-1 particle hyperspherical functions. Good convergence for the ground state energy in the number of included harmonics is obtained. (Received February 04, 2017)