

SHELL-MODEL MONTE CARLO STUDIES OF NUCLEI¹

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The pair content and structure of nuclei near $N = Z$ are described in the framework of shell-model Monte Carlo (SMMC) calculations. Results include the enhancement of $J=0$ $T=1$ proton-neutron pairing at $N=Z$ nuclei, and the marked difference of thermal properties between even-even and odd-odd $N=Z$ nuclei. Additionally, a study of the rotational properties of the $T=1$ (ground state), and $T=0$ band mixing seen in ^{74}Rb is presented.

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