

THE EFFECTS OF 3B FORCES ON ODD-ODD ^{136}Sb NEUTRON RICH NUCLEI STRUCTURE IN THE VICINITY OF ^{132}Sn

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ABSTRACT. The consideration of the three-body monopole effects can solve the spectroscopic problems resulting from the failure of the two body realistic interactions to reproduce some nuclear properties. In the framework of studying and understanding the role of these effects, shell model calculations have been realized for interpreting and developing the two body matrix elements of $N-N$ interaction. One of these nuclides, the ^{136}Sb with one proton and three neutrons in addition to the tin core is at present the most exotic open-shell nucleus beyond ^{132}Sn . Its ground state most likely has $J^\pi=1^-$ and arises predominantly from the $\pi(1g_{7/2})^1\nu(2f_{7/2})^3$ configuration.