

## Mixed Symmetry States in Even-Even $^{96-108}\text{Mo}$ Nuclei

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**Abstract:** Excitation energies and electromagnetic transition strengths in even-even  $^{96-108}\text{Mo}$  nuclei have been described systematically by using the proton-neutron interacting boson model (IBM-2). It appears that the properties of low-lying levels in these isotopes, for which the comparison between experiment and theory is possible, can be satisfactorily described by the IBM-2 model, provided proper account is taken of the presence at low energy of states having a mixed-symmetry character. It seems possible to identify, in each isotope, a few states having such a character, the lowest ones being either  $2_2^+$  or  $2_3^+$  levels. It is found that these nuclei are in the transition from U(5) to SU(3).

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