

Anomalies in the structure of the first excited K = 0 band in deformed nuclei

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Abstract

Z_β band mixing parameters for the transitions between the first excited K=0 band and the ground state band will be presented. These Z_β values were calculated for even-even heavy deformed nuclei using experimental B(E2) values and also Alaga rules. The varying consistency and inconsistency of Z_β values among different transitions for a given nucleus will be discussed in the context of the separation of intrinsic and rotational degrees of freedom.