Electromagnetic properties of heavy deformed nuclei in an algebraic model

GABRIELA POPA, Ohio University Zanesville — Calculations of electromagnetic properties of heavy deformed nuclei are presented. An algebraic model is used in a series of heavy deformed nuclei, governed by an overarching symmetry. The models treats protons and neutrons in the valence shells as fermions. The hamiltonian contains two parts, first is made of SU(3) generators, and the second one is the proton and neutron pairing interaction. Low energy spectra and electromagnetic transitions are compared to the experimental data.