Abstract Submitted
for the APR05 Meeting of
The American Physical Society

**IBM-2 calculation with configuration mixing for Ge isotopes**
ELIZABETH PADILLA-RODAL, OCTAVIO H. CASTAÑOS, ROELOF BIJKER, Instituto de Ciencias Nucleares, UNAM, ALFREDO GALINDO-URIBARRI, Physics Division, ORNL — Recent results on Coulomb excitation experiments of radioactive neutron-rich Ge isotopes at the Holifield Radioactive Ion Beam Facility allow the study of the systematic trend of $B(E2; 0^+ \rightarrow 2^+)$ between the sub-shell closures at $N = 40$ and the $N = 50$ [1]. The new information on the $E2$ transition strengths constitutes a stringent test for the nuclear models and has motivated us to revisit the use of Interacting Boson Model in this region. We show that the IBM-2 with configuration mixing is a successful model to describe the shape transition phenomena that take place around $N = 40$ in stable germanium isotopes, as well as the predictions given by this model about the evolution of the structure for the radioactive $^{78,80,82}$Ge nuclei.

[1] E. Padilla-Rodal Ph.D. Thesis UNAM; submitted for publication.

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Date submitted: 16 Feb 2005 Electronic form version 1.4