

An IBM2 Description of the E(5) Symmetry in ^{134}Ba and ^{108}Pd

ZHANG Da-Li¹ and WANG Hong-Ling²

¹ Department of Physics, Huzhou Teacher's College, Huzhou 313000, Zhejiang Province, China

² Department of Physics, Xuchang Teacher's College, Xuchang 461000, Henan Province, China
(Received: 2001-12-6; Revised:)

Abstract: With the low-lying energy levels, E2 transition branching ratios and absolute transition rates of the ^{134}Ba and ^{108}Pd , are investigated in the neutron-proton interacting boson model (IBM2) which includes the quadrupole-quadrupole interaction between like bosons and the E(5) symmetry, it shows that the IBM2 can describe the nuclei at critical point of a phase transition well.

PACS: 21.10.Re, 21.60.Fw, 27.60.+j

Key words: E(5) symmetry, ^{134}Ba , ^{108}Pd , neutron-proton interaction boson model

[\[Full text: PDF\]](#)

Close