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First observation of a new partner band in mass 200 region near Z=82 shell closure as a signature of triaxiality. SOUMIK BHATTACHARYA, Florida State University, Tallahassee, Florida-32306, S. BHATTACHARYYA, Variable Energy Cyclotron Centre, Kolkata, INDIA, S. DAS GUPTA, Victoria Institution (College), Kolkata, INDIA, R. BANIK, IEM, Kolkata, India , G. MUKHERJEE, Variable Energy Cyclotron Centre,Kolkata, INDIA, S. NANDI, MD. A. ASGAR, VECC,Kolkata, INDIA, A. DHAL, IFIN-HH, ELI-NP, Romania, R. RAUT, S.S. GHUGRE, S. K. DAS, S. CHATTERJEE, S. SAMANTA, UGC-DAE CSR (Kolkata), INDIA, SAJAD ALI, A. GOSWAMI, SINP,Kolkata, INDIA, SHABIR DAR, S. S. NAYAK, S. MUKHOPADHYAY, D. MONDAL, S. S. ALAM, T. BHATTACHARJEE, DEEPAK PANDIT, S. DAS, S. BASU, VECC,Kolkata, INDIA, S. RAJBANSHI, Presidency University, Kolkata, INDIA — The experimental observation of the wobbling motion as a signature of triaxial shapes in nuclei is of recent interest. The recent observation of wobbling in ^{183,187}Au nuclei boosted up the search for such exotic shape in heavier mass region. The deformation driving effect of $\nu i_{13/2}$ causes axial and non-axial shapes in Hg nuclei around A = 190. An experiment was performed at VECC, Kolkata, India, with 36-MeV α and using VENUS & INGA Clover array which reports a new ΔI = 2, E2 band in ^{199}Hg which decays to the yrast $\nu i_{13/2}$ band via a set of ΔI = 1, E2-like transitions with large δ mixing, a signature of wobbling. A signature partner band was also found. This would be the first example of wobbling in this region and first such case with a neutron-hole configuration.

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