Recent results on magnetic and chiral rotation in the vicinity of the Z = 82 shell Dimiter L. Balabanski^{1, 2, 3}

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Recent studies of the properties of "shears" states and magnetic rotational bands in the Pb nuclei will be reviewed and discussed in the light of the systematic occurrence of such excitations in this mass region. In particular, the $vi_{13/2}^{-1} \otimes \pi(h_{9/2}i_{13/2})_{11}^{-1}$ band [1,2] in ¹⁹³Pb will be discussed, where, as a result of a series of experiments which were carried out at the INFN Laboratori Nazionali di Legnaro, a full set of experimental observables has been obtained: the g factor [3] and the quadrupole moment [4] of the band head, and lifetimes within the band [5]. These, together with the measured g factors and quadrupole moments of the "blades of the shears" [6,7], allow a consistent test of the theoretical moments aiming at the description of such excitations.

The occurrence of triaxial deformations in the mass A \approx 190 Ir-Pt-Au nuclei will be discussed and recent spectroscopic results will be presented [8,9], and a possible assignment of chiral twin bands in ¹⁸⁸Ir will be discussed [10].

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