Abstract Submitted
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**Collective structures up to spin $\sim 65\hbar$ in the $N = 90$ isotones $^{158}$Er and $^{157}$Ho**[1] X. WANG, M.A. RILEY, S.L. MILLER, Florida State University, J. SIMPSON, STFC Daresbury Laboratory, E.S. PAUL, H.C. BOSTON, P. HAMPSON, D.S. JUDSON, P.J. NOLAN, J.M. REES, J.P. REVILL, University of Liverpool, R.V.F. JANSSENS, M.P. CARPENTER, C.R. HOFFMAN, F.G. KONDEV, T. LAURITSEN, S. ZHU, Argonne National Laboratory, C.J. CHIARA, Argonne National Laboratory/University of Maryland, U. GARG, A.D. AYANGEAKAA, J. MATTA, University of Notre Dame, D.J. HARTLEY, United States Naval Academy, D.C. RADFORD, Oak Ridge National Laboratory, L.L. RIEDINGER, University of Tennessee, I. RAGNARSSON, Lund University — Stable asymmetric or triaxial shapes are a longstanding prediction of theory [1]. In the present work, a third collective band in $^{158}$Er at spins beyond band termination was found in addition to the two previously reported ones [2]. The measured transition quadrupole moments ($Q_{\rm t}$ $\sim$ 10−11eb) have suggested that these bands possess a triaxial strongly deformed shape, based on comparisons with CNS calculations and with TAC calculations using the SHF model [3]. Three new collective bands with similar characters, tentatively assigned to $^{157}$Ho, will also be presented. [1] A. Bohr and B. R. Mottelson, Nuclear Structure, vol. II (1975); [2] E. S. Paul *et al.*, Phys. Rev. Lett. 98, 012501 (2007); [3] Y. Shi *et al.*, in preparation.

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