

Abstract Submitted  
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**$^{196}\text{Pt}$  and the  $\text{O}(6)$  Symmetry**<sup>1</sup> E.A. MCCUTCHAN, BNL,ANL, C.J. LISTER, M.P. CARPENTER, G. GURDAL, G. HENNIG, R.V.F. JANSSENS, T.L. KHOO, T. LAURITSEN, C. NAIR, D. SEWERYNIAK, S. ZHU, ANL, G. RAINOVSKI, N. PIETRALLA, T. MOELLER, C. BAUER, Institut fur Kernphysik, Darmstadt, D. CLINE, A.B. HAYES, University of Rochester —  $^{196}\text{Pt}$  is widely recognized as the textbook example of the  $\text{O}(6)$  symmetry of the Interacting Boson Model (IBM). Surprisingly, some of the unique IBM predictions for the  $\text{O}(6)$  limit have yet to be fully demonstrated in this nucleus. To rigorously test these predictions, a Coulomb excitation experiment was performed at the ATLAS facility at Argonne. Using a  $^{196}\text{Pt}$  beam at 850 MeV incident on a Carbon target, numerous low-spin, non-yrast states were populated.  $\gamma$  rays were detected using Gammasphere operated in singles mode. From the measured intensities, the Gosia program was used to extract E2 matrix elements between states associated with the  $\text{O}(6)$  structure. Results will be discussed in terms of how closely the  $\text{O}(6)$  symmetry is followed in  $^{196}\text{Pt}$ .

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