

Abstract Submitted  
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**Rotational Bands in  $^{172}\text{W}$** <sup>1</sup> J. GREENBERG, C.J. GUESS, Swarthmore College, S. TANDEL, UM-DAE Centre for Excellence in Basic Sciences, P. CHOWDHURY, University of Massachusetts Lowell, M.P. CARPENTER, Argonne National Laboratory, D.J. HARTLEY, U.S. Naval Academy, R.V.F. JANSSENS, T.L. KHOO, T. LAURITSEN, C.J. LISTER, D. SEWERYNIAK, Argonne National Laboratory, U. SHIRWADKAR, University of Massachusetts Lowell, X. WANG, S. ZHU, Argonne National Laboratory — Studying the structure of rotational bands in  $^{172}\text{W}$  is valuable for gaining a better understanding of deformed nuclei. Highly excited states of the isotope were populated from a 230 MeV  $^{50}\text{Ti}$  beam incident on a  $^{128}\text{Te}$  target at Argonne National Laboratory using the ATLAS accelerator.  $\gamma$  emissions from  $^{172}\text{W}$  in the range were measured using Compton suppressed germanium detectors in the Gammasphere array. Using this data, three new rotational bands were found, and several other bands were expanded.

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