

Abstract Submitted
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The study of ^{158}Gd from CEU to Present S.R. LESHER, Lawrence Livermore National Laboratory — The identification of 13 0^+ states by the $^{160}\text{Gd}(p,t)^{158}\text{Gd}$ reaction was presented as a poster at the 1998 CEU session. Since this identification, a subsequent $^{158}\text{Gd}(n,n'\gamma)$ experiment was performed at the University of Kentucky and γ rays associated with these levels were assigned. These assignments allowed lifetimes of many levels of varying spins to be determined and transition probabilities to be calculated. Follow one nucleus and one CEU student through a survey of the experimental results to the most current interpretations of the vibrational structure of the deformed ^{158}Gd .

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