Abstract Submitted
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Investigation into the Low-Energy Structure of Ru Isotopes via *G*-Factor Measurements M.J. TAYLOR, M.A. BENTLEY, University of York, N. BENCZER-KOLLER, G. KUMBARTZKI, G. GURDAL, Rutgers University, V. WERNER, J. QIAN, R. WINKLER, A. HEINZ, E. WILLIAMS, E.A. MCCUTCHAN, R. CASPERSON, Yale University, A.E. STUCHBERY, Australian National University, B. SHORAKA, University of Surrey, Z. BERANT, Nuclear Research Centre Negev, R. LUTTKE, TU Darmstadt — An experiment was performed to investigate the low-energy structure of the even-A $^{96-104}_{44}$Ru isotopes. The experiment utilised the transient field technique combined with Coulomb excitation in inverse kinematics to measure the g factors of the first excited 2^+_1states. The transient field was calibrated through measurements of the known $g(2^+_1)$ in ^{102}Ru and ^{98}Mo. The experiment constituted the first ever measurement of the $g(2^+_1)$ for ^{96}Ru as well more accurate relative measurements of the $g(2^+_1)$ for ^{98,100,104}Ru. Preliminary analysis of the data taken for ^{96}Ru indicates a value for the $g(2^+_1)$ close to the collective limit Z/Asuggesting that the two neutrons and six proton holes outside of the $N = Z$=50 closed shells contribute equally to the 2^+_1 state wave function. The technique used, results and theoretical interpretations will be presented.

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