Abstract Submitted for the DNP08 Meeting of The American Physical Society

g-factor measurements in ¹³⁴Te and ^{140,142}Xe CHRIS GOODIN, K. LI, A.V. DANIEL, N.J. STONE, A.V. RAMAYYA, J.H. HAMILTON, SH. LIU, J. STONE, Vanderbilt University — By using new techniques developed for measuring angular correlations with Gammasphere, the g-factor of the 4^+ state in ¹³⁴Te has been measured for the first time. The g- factor measurement is compared to shell model predictions and good agreement is found between experiment and theory. The g-factors of 2^+ states in ^{140,142}Xe are also measured for the first time with this method. g-factors in ¹⁴⁶Ba and ^{146,148}Ce are measured to establish the method by comparison with previous values. The results are discussed in terms of IBM-2 and rotation-vibration models.

Chris Goodin Vanderbilt University

Date submitted: 02 Jul 2008

Electronic form version 1.4