Abstract Submitted for the DNP06 Meeting of The American Physical Society

g-Factors in 94Zr¹ D.A. KOVACHEVA, C.A. COPOS, University of Richmond — V.Werner2, P. Boutachkov3, E. Stefanova3, N. Benczer-Koller3, G. Kumbartzki3, N. Pietralla4, M. Perry5, M. Fetea1, H. Ai2, R.B. Cakirli2, 6, R.F. Casten 2, M. Chamberlain 2, 7, C.R. Fitzpatick 2, 7, A.B. Garnsworth 2, 7, G. Gurdal2, 8, A. Heinz2, X.Liang2, 9, P. Maier-Komor10, E.A. McCutchan2, D.A. Meyer2, J. Qian2, K.-H. Speindell1, A.E. Stuchbery12, N.J. Thompson2, 7, E. Williams2, R. Winkler2, K. Aleksandrova1, G. Anderson1, B. Darakchieva1, M. Evtimova1, P. Manchev1, J.P. Greene2, C. Lambie-Hanson2. 1 U. of Richmond, 2 WNSL, Yale, 3 Rutgers University, 4 Universitat zu Koln, DE, 5 Florida State University, 6 Istanbul University, TR, 7 U. of Surrey, UK, 8 Clark University, 9 U. of Paisley, UK, 10 Technische Universitat Munchen, DE, 11 Universitat Bonn, DE, 12 Australian National University — An experiment was performed to investigate the p-n configurations in symmetric and mixed-symmetric low-lying states, in 94Zr. A precession nuclear measurement was used to deduce g-factors. The 94Zr was accelerated at WNSL to 275 MeV with intensities of 1pnA. The 94Zr isotope was Coulomb excited in the C layer and exposed to a strong transient magnetic field in the Gd layer of the multilayered target. Gamma rays were detected in coincidence with the forward-scattered C in either of four clover Ge detectors. Preliminary results on anisotropy ratios of intensities at two angles will be presented

¹Work supported by grants: NSF PHY 0204811 and 0555665, Jeffress J-809, US DOE DE-FG02-91ER-40609 and DE-FG02-88ER-40417.

D.A. Kovacheva Department of Physics, University of Richmond

Date submitted: 31 Jul 2006 Electronic form version 1.4