Abstract Submitted
for the DNP11 Meeting of
The American Physical Society

Collectivity of Cr Isotopes Approaching N = 40[1] T. BAUGHER, A. GADE, D. BAZIN, J.M. COOK, D.-C. DINCA, T. GLASMACHER, W.F. MUELLER, A. RATKIEWICZ, D. WEISSHAAR, S. MCDANIEL, G. GRINYER, K. WALSH, NSCL, R.V.F. JANSSENS, M.P. CARPENTER, F.G. KONDEV, S. ZHU, I. STEFANESCU, E. RICARD-MCCUTCHAN, ANL, S. FREEMAN, A. DEACON, J.F. SMITH, B. KAY, D. SHARP, Manchester — The reduced quadrupole transition probability, $B(E2;0^+ \rightarrow 2^+)$, provides a way to quantify low-lying collectivity in even-even nuclei. $B(E2)$ values for ^{58,60,62}Cr were extracted using intermediate-energy Coulomb excitation at the NSCL. Cocktail beams containing ^{58,60,62}Cr were produced in-flight and guided onto a high-Z target. De-excitation gamma-rays tagging the inelastic process were detected in coincidence with the scattered particles using the high-purity germanium array SeGA and the S800 spectrograph. The measurement allowed the $B(E2)$ values of ^{60,62}Cr to be extracted for the first time. Results are compared to large-scale shell-model calculations using a recent effective interaction developed for this region.

[1]This work was funded by the NSF under contract PHY-0606007; by the US DOE, ONP, under contracts DE- AC02-06CH11357 and DE-FG02-08ER41556 and by the UK Science and Technology Facilities Council (STFC).

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Date submitted: 01 Jul 2011 Electronic form version 1.4