Abstract Submitted for the DNP07 Meeting of The American Physical Society

Structure of Fe isotopes at the limits of the pf-shell<sup>1</sup> NATHAN HOTELING, W.B. WALTERS, Department of Chemistry, University of Maryland, College Park, MD 20742, R.V.F. JANSSENS, Department of Physics, Argonne National Laboratory, Argonne, IL 60439 — In this paper, new data from the deep-inelastic reaction of <sup>64</sup>Ni and <sup>238</sup>U will be discussed with respect to new levels identified in the Fe isotopes near N=40. Results will be discussed within the framework of the shell model "beyond the pf-shell", and implications to the structural trends in this region will be assessed. Particular emphasis will be directed toward new level schemes that have been deduced for <sup>61</sup>Fe and <sup>64</sup>Fe, and new low-spin structure identified from beta-decay of <sup>62</sup>Mn in "delayed" spectra.

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