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Upgrading the Vandle Analysis code for Transfer Reactions ZACHARY TULLY, Univ of Wisconsin, LaCrosse, WILLIAM PETERS, University of Tennessee, CRAIG REINGOLD, Rutgers University — The Versatile Array of Neutron Detectors at Low Energy (VANDLE) is a detection system composed of over 200 plastic scintillating bars of various sizes. The detector setup is highly modular and therefore can be optimized to meet the experimental requirements for beta-delayed neutron and transfer reaction experiments which are important for nuclear structure and astrophysics. When mounted in an array around the target VANDLE has good angular resolution with a high intrinsic efficiency. Recent (α, n) and (d, n) experiments require enhancements to the custom analysis code in order to determine transferred energy in the center of mass frame. We present results of the enhanced analysis code and some preliminary transferred-energy spectra for $^{19}F(\alpha, n)\,^{22}Na$.

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