Examples for low energy nuclear physics simulations using GEANT4 L. ERIKSON, K. CHIPPS, U. GREIFE, F. SARAZIN, Colorado School of Mines, Golden, CO, USA, J. BLACKMON, Physics Division, Oak Ridge National Laboratory, Oak Ridge, TN, USA — General purpose software libraries such as the latest version of the Geometry and Tracking toolkit (GEANT4) continue to gain favor in the physics community. The advancements offered in GEANT4 are considerable but utilization isn't trivial. One possible approach is to extend GEANT4 with a flexible software package designed to simulate and analyze commonly used detectors in this field. Such a package could be used with a number of projects allowing for greater focus on physics over software. This talk describes the use of such a library to study a variety of applications, including: a cosmic ray veto, experiments with radioactive nuclear beams, and a neutrino detector.

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