Abstract Submitted for the HAW05 Meeting of The American Physical Society

Polarized Neutron β -decay: the Proton Asymmetry and Recoil-Order Currents SKY SJUE, ALEJANDRO GARCíA, University of Washington — We present an analytic calculation of the proton asymmetry from polarized neutron β -decay, including recoil-order effects. The differential decay rate in terms of electron energy and proton direction follows, parametrized in terms of the most general Lorentz-invariant hadron current coupled to a left-handed lepton current. Implications for experimental efforts to measure recoil-order currents are discussed.

Alejandro Garcia University of Washington

Date submitted: 23 May 2005 Electronic form version 1.4