Abstract Submitted for the APR10 Meeting of The American Physical Society

Study of SNO+ liquid scintillator energy response HOK SEUM WAN CHAN TSEUNG, Center for Experimental Nuclear Physics and Astrophysics, University of Washington — SNO+ is a large-volume underground liquid scintillator detector that exploits the infrastructure of the completed Sudbury Neutrino Observatory experiment. The goals of SNO+ include: (1) an extension of current low-energy solar neutrino measurements by detecting neutrinos from the pep and CNO chains, (2) a study of reactor and geo-neutrinos, and (3) a search for neutrino-less double-beta decay, by adding Nd-150 to the scintillator. A deep knowledge of the scintillator energy scale is crucial for the success of SNO+. This talk will describe our efforts to understand the scintillator response to ionizing particles.

Hok Seum Wan Chan Tseung Center for Experimental Nuclear Physics and Astrophysics, University of Washington

Electronic form version 1.4

Date submitted: 26 Oct 2009