

Abstract Submitted
for the APR09 Meeting of
The American Physical Society

Obtaining the Electron Neutrino Survival Probability from the Low Energy Data from the Sudbury Neutrino Observatory STANLEY SEIBERT, Los Alamos National Laboratory, SUDBURY NEUTRINO OBSERVATORY COLLABORATION — The charged current interaction between electron neutrinos and deuterium in the Sudbury Neutrino Observatory has excellent sensitivity to the energy distribution of the electron neutrinos at the Earth. Using this information and the total active solar neutrino flux measured by the neutral current process, we can directly extract the electron neutrino survival probability as a function of neutrino energy. This talk presents the survival probability obtained from an analysis of the data collected in the first two phases of SNO with an effective electron kinetic energy threshold of 3.5 MeV.

Stanley Seibert
Los Alamos National Laboratory

Date submitted: 09 Jan 2009

Electronic form version 1.4