

The Precision Reactor Oscillation and Spectrum Experiment (PROSPECT) is a short-baseline reactor antineutrino experiment designed to perform a sterile neutrino oscillation search and make a precise measurement of the neutrino energy spectrum from a compact reactor core, located at the highly enriched High Flux Isotope Reactor at Oak Ridge National Laboratory. In its first phase, PROSPECT demonstrated a superior signal-to-background while operating with minimal overburden, motivating an absolute flux measurement at the few percent level that has potential impacts on understanding the reactor antineutrino anomaly and the global flux picture, as well as reactor monitoring with neutrino detectors. This talk will present the steps required to make an absolute flux measurement with PROSPECT of reactor neutrinos from a nearby research reactor, specifically highlighting ongoing simulation and data analysis to calculate signal detection efficiency and uncertainty on the efficiency. A derivation of what numerical value should be reported in a flux measurement, as well as current progress on estimating each component of the total flux will also be given.