

Abstract Submitted
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Measurement of Room Return Neutrons BRIAN OSTLER,
LAWRENCE REES, J. BART CZIRR, Brigham Young University — It is often
difficult to determine accurately the number of neutrons incident on a detector
because of room return, the scattering of neutrons from nearby material into the
detector. We have developed a neutron detection platform mounted on a scissor lift
so that room return can be minimized in our counting experiments. I am measur-
ing the neutron counting rate as a function of the height of the platform above a
concrete slab located below the lift. I am doing this measurement with a cadmium
capture-gated neutron detector with neutrons from a ^{252}Cf source located at a
fixed position on the platform.

Brian Ostler
Brigham Young University

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