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Neutron Scattering Dependence on Proximate Human Tissue from Fast Neutrons BRENT ROGERS, CORY HOSHOR, PAUL SCOTT, JOSEPH CROW, NOAH KRAMER, ANTHONY CARUSO, Univ of Missouri - Kansas City — Neutrons incident on a human may undergo scattering, altering their energy. It is necessary to acknowledge that a proximate human moderator may non-trivially alter the neutron flux and source spectrum for a given neutron detection/spectroscopic device. Using primarily the Monte Carlo N-Particle (MCNP) transport code, the neutron-human moderator dependence will be discussed with respect to the rigorous quantification of human tissue composition and proximity/geometry on neutron moderation. MCNP simulated results will then be discussed in view of empirical results.

Brent Rogers
Univ of Missouri - Kansas City

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