

Abstract Submitted
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Developing a Shielding Model for the n, n-bar Experimental Beamline at the European Spallation Source¹ CALEB REDDING, L.W. TOWNSEND, University of Tennessee — Under development is a radiation shielding model for the n, n-bar beamline at The European Spallation Source in Lund, Sweden. The size of the beamline adds a layer of complexity to this problem. With the beamline being 200-meters long and having a 4-meter diameter, the problem cannot be solved using Monte Carlo methods in analog mode. Variance reduction techniques must be used in order to approach a statistically sound answer within a reasonable timeframe. In this talk an overview of the problem, variance reduction methods, and current status of the model build will all be provided.

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