

Abstract Submitted
for the TSS15 Meeting of
The American Physical Society

Bremsstrahlung produced by low-energy (keV) electrons incident on thick Ag SEAN CZARNECKI, SCOTT WILLIAMS, Angelo State University — Recently, there has been some controversy concerning whether polarizational bremsstrahlung (sometimes referred to as “atomic bremsstrahlung”) contributes to the total bremsstrahlung spectrum in experiments involving electrons incident on solid-film targets. Here, the bremsstrahlung probability density predictions of the widely-used Monte Carlo code, PENELOPE, are compared to the results of experiments involving 17.5-keV and 20-keV electrons incident on a thick Ag target. Comparisons of the results of our experiments to the predictions of the PENELOPE code, which is based on ordinary bremsstrahlung alone, suggest that there were no significant polarizational bremsstrahlung contributions to the total bremsstrahlung spectra in our experiments.

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Date submitted: 04 Feb 2015

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