

Abstract Submitted
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**Estimating Super Heavy Element Event Random Probabilities
Using Monte Carlo Methods¹** MARK STOYER, ROGER HENDERSON,
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DAWN SHAUGHNESSY, PHILIP WILK, LLNL — Because superheavy element
(SHE) experiments involve very low event rates and low statistics, estimating the
probability that a given event sequence is due to random events is extremely impor-
tant in judging the validity of the data. A Monte Carlo method developed at LLNL
[1] is used on recent SHE experimental data to calculate random event probabili-
ties. Current SHE experimental activities in collaboration with scientists at Dubna,
Russia will be discussed.

[1] N.J. Stoyer, et al., Nucl. Instrum. Methods Phys. Res. A 455 (2000) 433.

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