

Abstract Submitted  
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**Quantum Effects in Nanoscale MOSFET Devices at Low Temperature**<sup>1</sup> ALEXANDRA DAY, Wellesley College — MOSFET transistors are a key component of virtually all modern electronic devices. Today's most advanced MOSFETs are small enough that quantum mechanical effects become relevant when considering their function and use. This project, completed at the National Institute of Standards and Technology as part of a Society of Physics Students internship, presents a first step in describing the theoretical behavior of nanoscale MOSFETs at low temperature.

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