

Abstract Submitted  
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**A Reconfigurable Device Architecture for Si/SiGe Quantum Dots**<sup>1</sup> D. ZAJAC, T.M. HAZARD, X. MI, J.R. PETTA, Department of Physics, Princeton University — Depletion mode architectures for gate-defined quantum dots have been successful in the implementation of single, double and triple quantum dots. However, scaling up to more complicated devices presents serious lithographic challenges for depletion mode devices. We present a reconfigurable, accumulation-only mode lateral quantum dot device. We demonstrate full control of the device as both a single quantum dot with a single dot sensor and a double quantum dot with a single dot sensor. We reach the few electron regime in both operating modes.

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