

Abstract Submitted  
for the MAR09 Meeting of  
The American Physical Society

**A few-electron triple quantum dot incorporating two fast charge sensors**<sup>1</sup> EDWARD LAIRD, CHARLES MARCUS, Department of Physics, Harvard University, MICAH HANSON, ART GOSSARD, Materials Department, University of California at Santa Barbara — A triple quantum dot is defined in a GaAs heterostructure. The occupation of all three dots is monitored using two nearby charge sensing point contacts. Radio frequency multiplexing in a reflectometry setup allows MHz-bandwidth measurements of both charge sensors independently. Configuring the device in the few-electron regime, we achieve coherent spin manipulation using the exchange interaction.

<sup>1</sup>We acknowledge support from ARO/iARPA, Department of Defense, and Harvard Center for Nanoscale Systems.

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Date submitted: 20 Nov 2008

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