

Abstract Submitted
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Capacitance lineshape in a two-channel quantum dot design C.

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We propose a set-up and discuss how the charge fluctuations on a small dot can be experimentally accessed by using a system of two single electron transistors arranged in parallel. We derive a microscopic Hamiltonian description of the set-up that allows us to make connection with the two-channel Anderson model (extensively used in heavy-Fermion systems) and make detailed predictions for the differential capacitance of the dot.

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