

TENTATIVE TITLE: Entanglement Propagation in quantum dots.

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The Heisenberg exchange interaction plays an important role in the scattering of entangled electrons in spin qubits. We analyse an exactly solvable scattering problem for entangled electrons in a GaAs/AlGaAs waveguide containing multiple quantum dots. We show that scattering resonances determine the dynamics of the scattering process for the entangled electrons.