Laser induced electron transport in double quantum dot

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The transport of a single electron between two anharmonic, conjugated quantum dots by a laser in the radio frequency regime is investigated. The laser has polarization parallell to the axis of the system and frequency in resonance with some transition between states that both lie below the barrier between the dots. *Ab initio* calcualtions are performed and compared with the prediction of an analytical four level model. Full quantitative agreement is achieved.