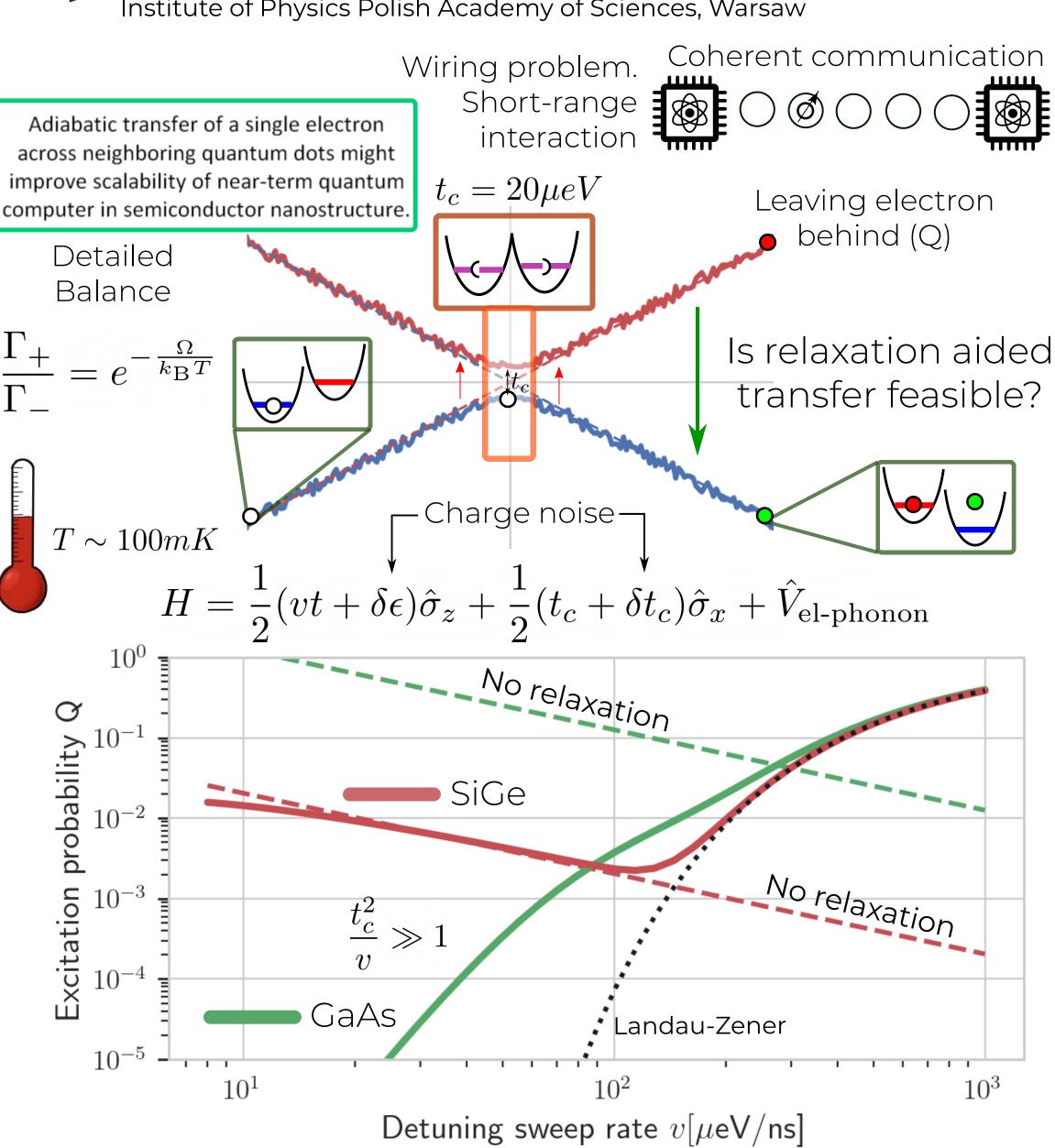
Relaxation Aided Charge Transfer Between Two Quantum Dots at Finite Temperature



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However slow transfer needed for adiabatic evolution increases probability of energy transfer between the electron and environmental fluctuations, charge noise and phonons. We shed a light on apparent trade-off between the excitation and relaxation for experimentally relevant parameters. We show the relaxation aided transfer is efficient in GaAs, however not in SiGe due to lack of piezoelectric phonon coupling.