Theoretical modeling of the collective tunneling of a Wigner necklace

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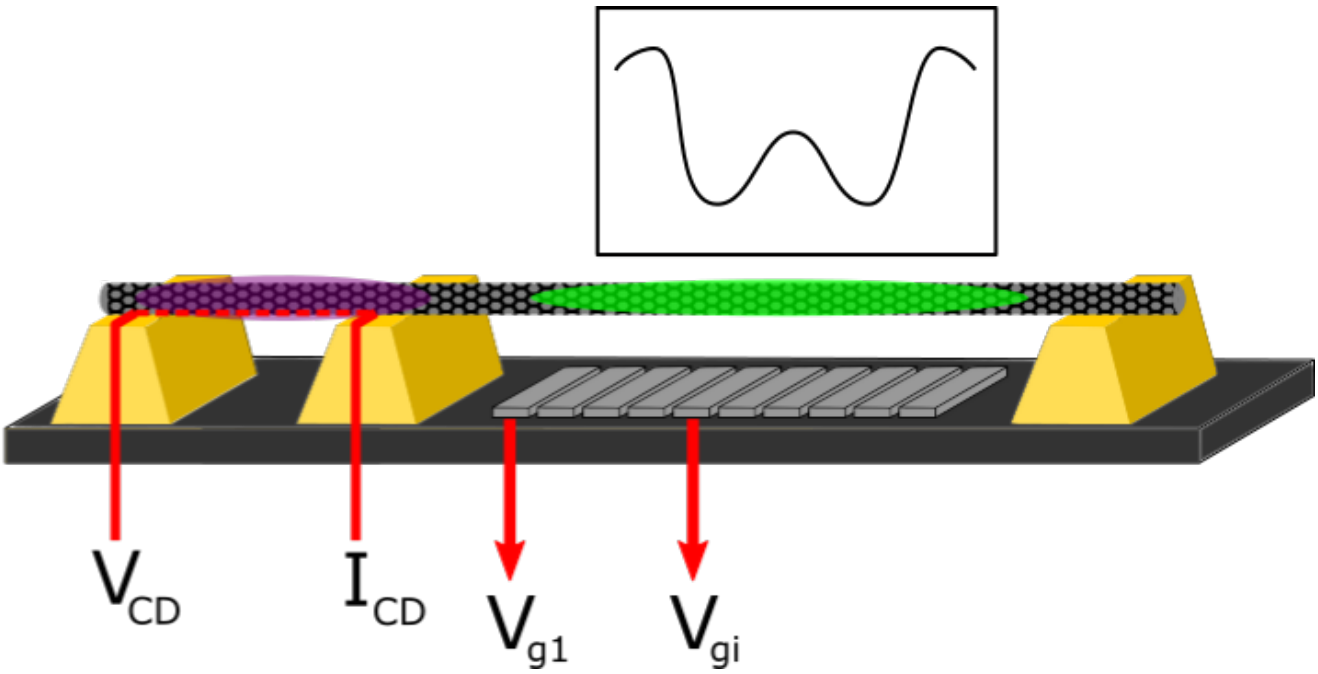

FIG. 1. Experimental setup scematics

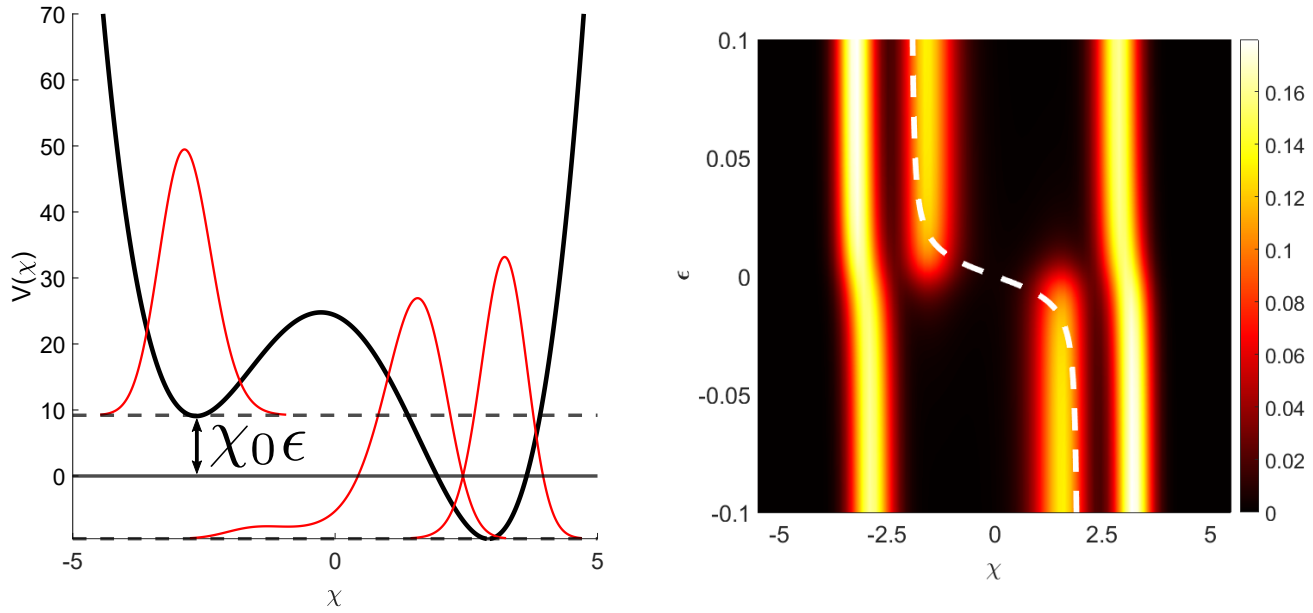

FIG. 2. Effective potential in case of 3 particles and wavefunction density as a function of detuning paramtere (ϵ) Mikló's idea was to change back the colorscheme to 'hot' like the science article, due to black and white printing might be more visible using this. Insted of ϵ it is more accurate to write $\chi_0\epsilon$

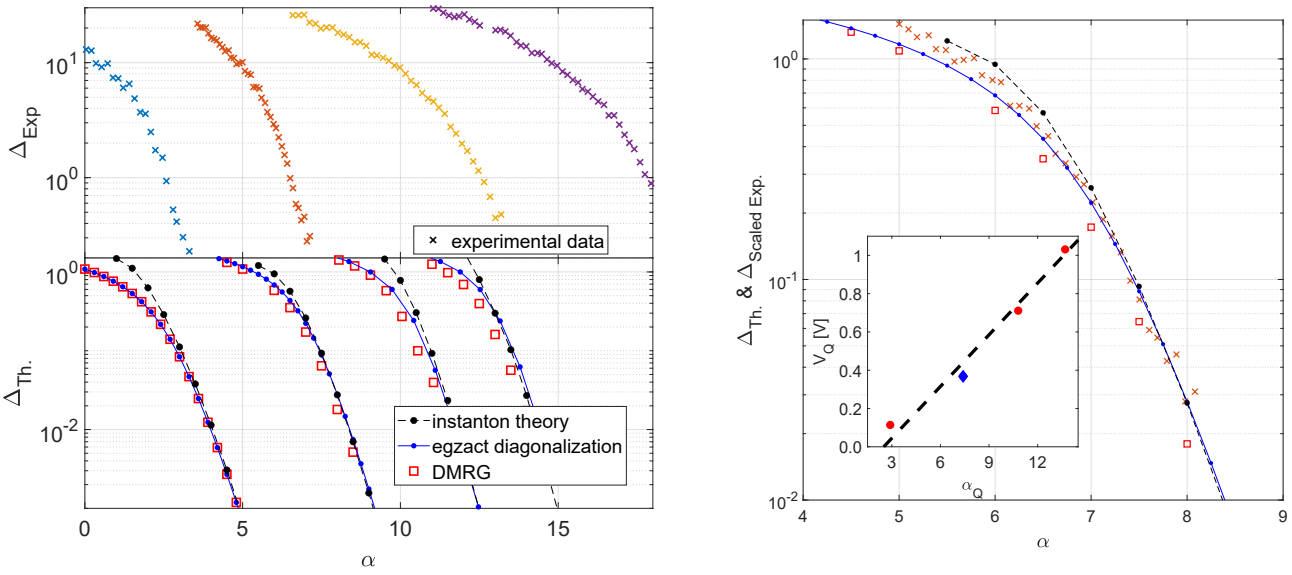

FIG. 3. Polarization as a function of detuning, compraed to experiment Small text size mismatch

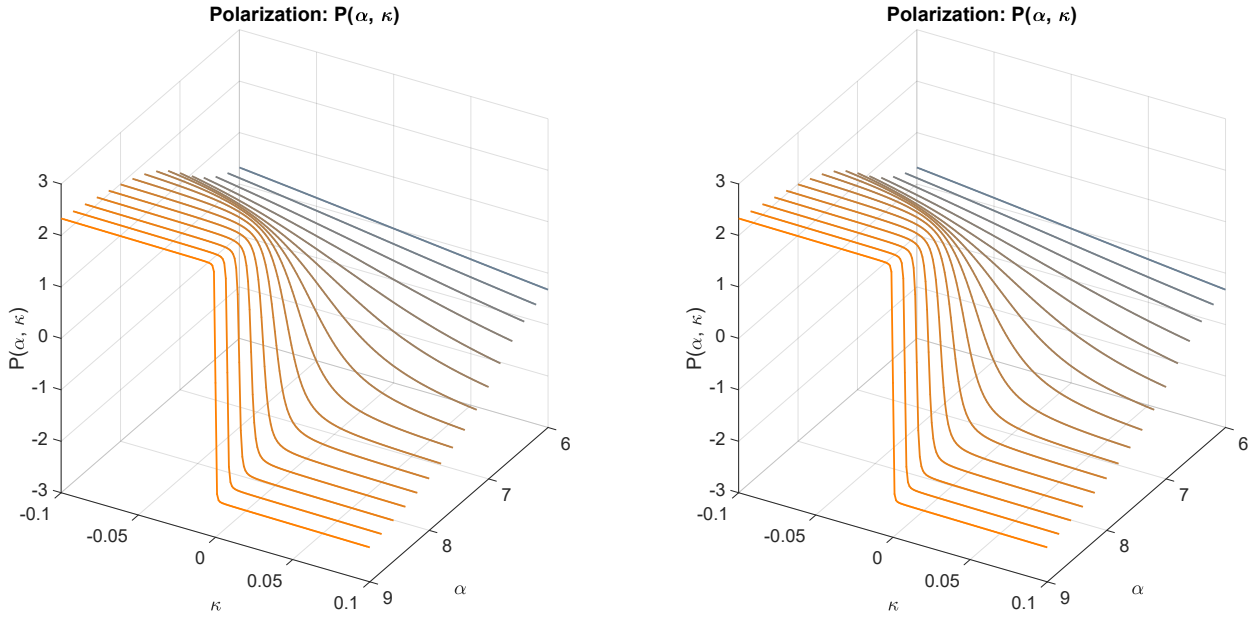

FIG. 4. Polarization as a function of potential barrier height (α) and detuning (ϵ) parameters, compared to experimental data. experimental data not yet available so same picture twice