

(Abstract for a **poster**)

Time-dependent transport through a quantum dot coupled to Luttinger liquid leads

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In this poster I will present the results of a calculation of the time-dependent current flowing through a quantum dot coupled to Luttinger liquid leads. The Tomonaga-Luttinger model is useful to describe the effect of interactions in 1D fermionic systems such as quantum wires or carbon nanotubes. A Keldysh nonequilibrium Green's functions technique is used, which permits to study time-dependent transport in the far from equilibrium, nonlinear response regime. The time-dependent current is investigated for various values of the interaction strength g . The Fermi liquid regime is shown to be recovered in the noninteracting $g = 1$ limit.