# Conductivity of anharmonic chains with energy conserving noise

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## ABSTRACT

We consider the dynamics of a one-dimensional chain of anharmonic oscillators where velocities are flipped at random times. The process conserves hence the total energy. The system is driven at the boundaries by heat baths and constant mechanical forces. We derive (heuristically) the Green-Kubo formula for the conductivity. We show (rigorously) the existence of the Green-Kubo formula and give some informations about its temperature dependence. In the harmonic case where exact computations can be performed we show how to get a boiler. Joint work with Stefano Olla.