Short time:

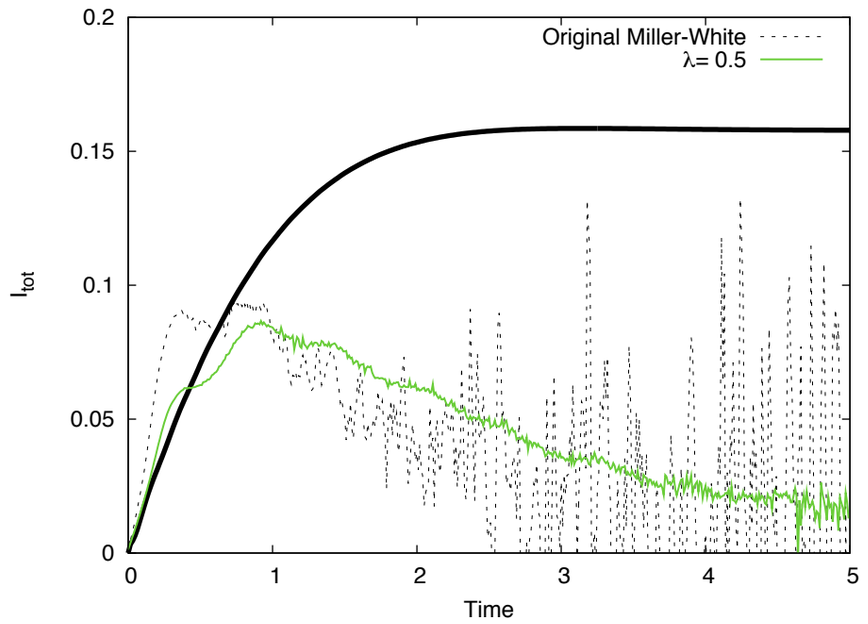
Match the *t*=0 time derivatives

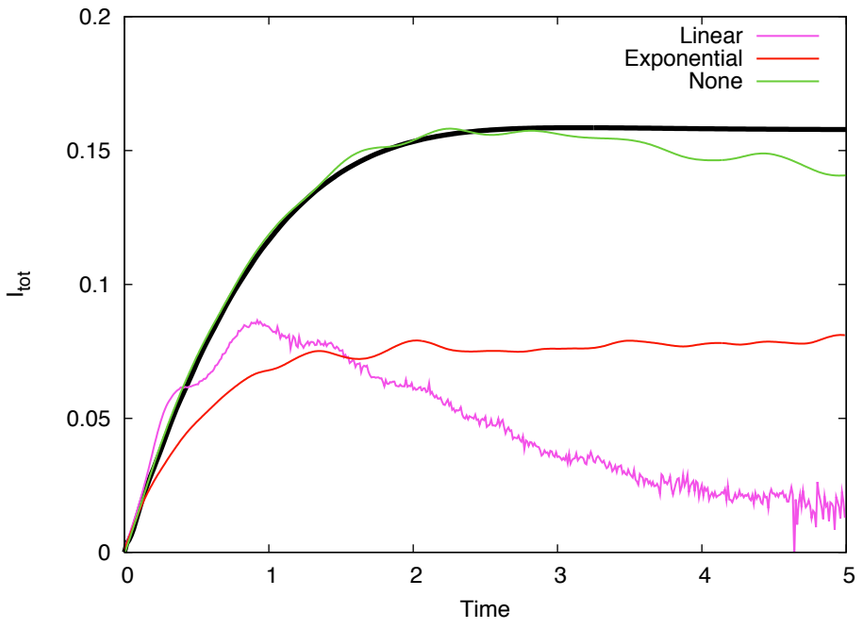
Intermediate time:

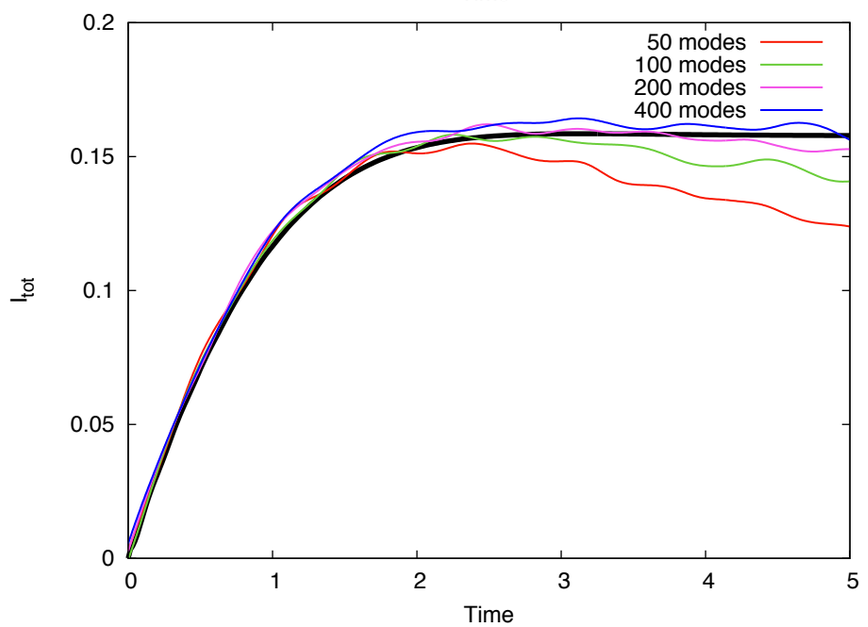
Remove the normal ordering “book-keeping” from dynamics

Long time:

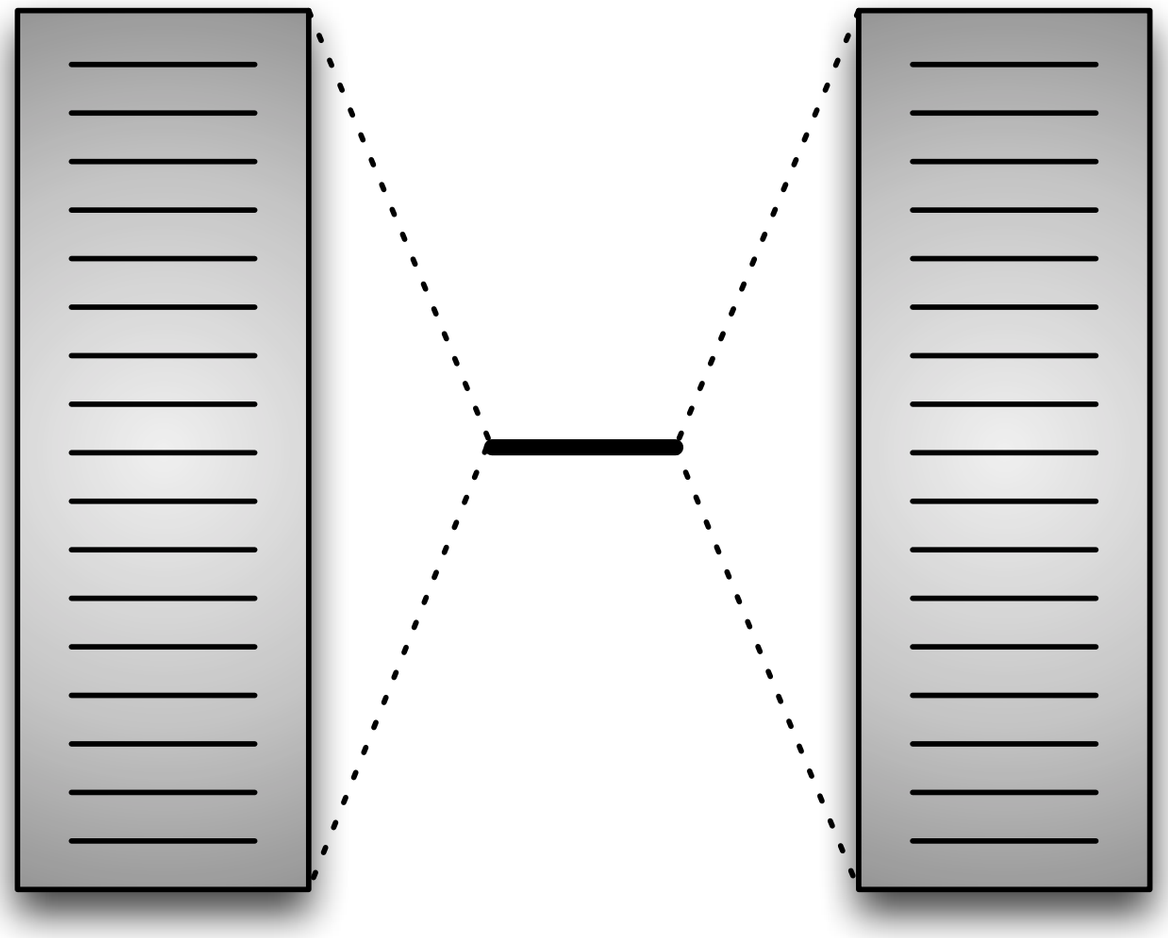
Include more modes in the electrodes.







Landauer Model



$$\sum_{k\in L}\epsilon_k n_k + \epsilon_0 n_0 + \sum_{k\in R}\epsilon_k n_k$$

$$+\sum_{k\in L} t_k \sqrt{\left(\sigma^2-(n_k-1/2)^2\right)\left(\sigma^2-(n_0-1/2)^2\right)}\ \cos(q_0-q_k)$$

$$+\sum_{k\in R} t_k \sqrt{\left(\sigma^2-(n_k-1/2)^2\right)\left(\sigma^2-(n_0-1/2)^2\right)}\ \cos(q_0-q_k)$$

DWHS, Levy, Cohen, Rabani, Miller. JCP **134**, 164103 (2011)