

Aspects of the dynamics we tried to change

1D

- **Average domain length** (asymptotic) from random: As the coarsening is slow (logarithmic) in 1D and we can choose the average domain size at the end of the linear dynamics, by choosing C . We can choose the average domain length in 1D.
- **Speed of two kinks attraction:**
 - While fast oscillations do not change the decay of the distance as a function of time, slow oscillation introduce a deviation from the constant C case.
 - Higher is the amplitude and smaller is the decay time (it can be reduced of many orders of magnitude!).
 - If C_{min} is far enough from zero (far enough respect to the period T) we can catch this deviation (steps in the $d(t)$ plot) with our model.
 - Unfortunately slow oscillation introduce just a variation of the prefactor of the decay, that is still exponential and not a power law.
- **Invert the kink attraction:** It is possible to choose the shape of the kinks such that a kink and an antikink repulse instead of attracting. But this will hold just until the kink's shape relaxes to a tanh profile and then the kinks will start to weakly attract.

2D

- **Average domain length** (asymptotic) from random: As in 2D the coarsening is fast (power law), then it is not possible to choose the asymptotic size of domains, as it increases with time.
- **Speed of circular domain shrinking:**
 - Neither fast, nor slow oscillation can change the profile of the decay of the area $R^2(t)$. Deviations measured numerically are numerical errors.
 - BUT if the oscillations are slow and C_{min} is close enough to zero, then we see an enhancement of the decay when C is close to C_{min} . This enhancement is 2 orders of magnitude smaller than the leading order effect (MBC).
- **Coarsening exponent:** Oscillations do not affect the exponent of the 2D coarsening, that is $\frac{1}{2}$.