

Entanglement dynamics

- Initial state constructed from solvable tensors

$$|\Psi(\{\mathcal{N}\})\rangle = \text{[Diagram of a 1D chain of tensors with vertical legs]}$$

- Reduced density matrix $\rho_A(t) = \text{Tr}_{\bar{A}} (|\Psi(t, \{\mathcal{N}\})\rangle \langle \Psi(t, \{\mathcal{N}\})|)$

$$\rho_A(t) = \text{[Diagram showing a tensor network for a reduced density matrix. A central horizontal strip of tensors is highlighted in white, representing region A. The rest of the network is in gray. A bracket above the strip is labeled A. The diagram is split horizontally into a light gray top half and a light red bottom half, representing the trace over the complement of A.]}$$