

Entanglement dynamics

- Initial state constructed from solvable tensors

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

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

$$\rho_A(t) = \text{[Diagram of a 2D tensor network for the reduced density matrix. It features a central horizontal strip of solvable tensors (shaded gray) with indices extending into a red-shaded region below. A bracket above the top part of the network is labeled 'A', indicating the region traced out to obtain the reduced density matrix. The entire structure is enclosed in a large rectangular frame with nested lines.]}$$