

Optimization problem
QUBO formulation

$$\sum_{i=1}^{N-1} \sum_{j>i}^N q_{ij} x_i x_j + \sum_{i=1}^N q_{ii} x_i$$

Ising Hamiltonian

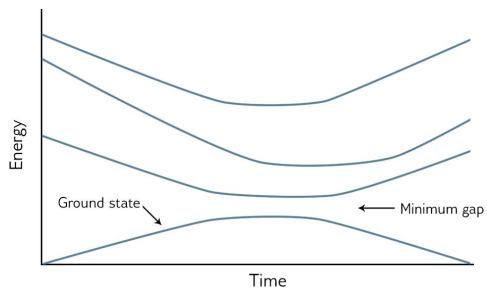
$$H = - \sum_{i,j} J_{ij} Z_i Z_j - \sum_j h_i Z_i$$

Annealing Hamiltonian

$$H(t) = (1 - s(t))H_0 + s(t)H_p$$

MPO

Adiabatic Quantum Computing (AQC)
Algorithm: quantum annealing



Tensor Networks (TN)
Algorithm: DMRG

