

# Entanglement in Adiabatic Quantum Computation

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Entanglement is an important resource for adiabatic quantum computation. By considering the quantum adiabatic algorithm performed upon a sub-manifold of Hilbert space with a bounded degree of entanglement, one may determine the resources required to solve a given problem [Crowley et al PRA90, 042317 (2014), Bauer et al ArXiv:1501.06914]. I shall discuss this and the role of the environment in restricting the available entanglement resources. Understanding the dynamics of this process may inspire new methods of error correction for adiabatic computation.