

# UNDERSTANDING QUANTUM COMPUTATION AND QUANTUM ANNEALING

BOAZ TAMIR\*

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*The purpose of this paper is to give a non-technical and elementary introduction to the fundamental ideas underlying quantum tunneling, quantum computation, quantum annealing and related topics. We start with the most basic terms such as superposition and tunneling, we then motivate the search for quantum computers. Next we use a toy model to demonstrate the notion of annealing, both classical and quantum. We end with a more formal review of some well-known results.*

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