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Quantum annealing applications in high-energy phenomenology

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Quantum annealing provides an optimization framework with the potential to outperform classical algorithms in finding the global minimum of non-convex functions. The availability of quantum annealers with thousands of qubits makes it possible today to tackle real-world problems using this technology. In this talk, I will review the quantum annealing paradigm and its use in the minimization of general functions. I will then discuss some of the applications of this method in high-energy physics, including training neural networks for classification, and fitting effective field theories to experimental data.

Significance

References

Experiment context, if any

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