

Abstract Submitted
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Quantum simulated annealing SERGIO BOIXO, UNM, ROLANDO SOMMA, Perimeter Institute, HOWARD BARNUM, LANL — We develop a quantum algorithm to solve combinatorial optimization problems through quantum simulation of a classical annealing process. Our algorithm combines techniques from quantum walks and quantum phase estimation, and can be viewed as the quantum analogue of the discrete-time Markov Chain Monte Carlo implementation of classical simulated annealing.

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