

Abstract Submitted
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Bohmian Trajectories for Quantum Information MATTHEW LAWYER, JEAN-FRANCOIS VAN HUELE, Brigham Young University — Quantum computing relies on qubits and superposition. Bohmian mechanics relies on continuously defined trajectories, rejecting the idea of superposition. Can quantum computers be used to distinguish between Bohmian mechanics and canonical quantum mechanics? To help answer this question, I study the trajectories of simple harmonic oscillators. I numerically calculate trajectories using Bohm's quantum potential and provide illustrations.

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