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## Application of Quantum Complexity in Neutrino Oscillations

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Neutrino flavor oscillation is a widely studied physical phenomena with far reaching consequences in understanding the standard model of particle physics and to search for physics beyond it. Oscillation arises because of mixing of the mass states in flavor states, and their evolution over time. It is an inherent quantum system for which flavor transitions are traditionally studied with probabilistic measures. Quantum information theory in recent years have seen applications in neutrino oscillation physics. Here, we will present results from an investigation of neutrino oscillations using quantum spread complexities and consequences for high-energy neutrinos.

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